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THE GREEK SCEPTICS

THE GREEK SCEPTICS

BY

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σοφίῃ ἄταμβος ἀξίη πάντων
τιμιωτάτη οὐσα.

Democritus

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TO
PROFESSOR AND MRS. FREDERICK BARRY
IN GRATEFUL APPRECIATION OF THE INSPIRATION AND HELP THAT
MADE THE COMPLETION OF THIS WORK POSSIBLE

PREFACE

The work on Greek Scepticism which is here presented has been prepared with the ardent desire of ministering to a long-felt need. While other phases of Greek Philosophy have been discussed critically and exhaustively, and important works on Greek Scepticism have been published in German, French, Italian, and even in Russian, there are few sources of information on this theme available in the English language. It is, however, the hope of the author that this phase of Greek Philosophy will, in the near future, be given its place in English literature. The subject is of great importance because of its close relation to the development of scientific research and philosophic thought.

My thanks are due Dr. Karl Praechter, Professor of Classical Philology in the University of Halle, and to Dr. Anathon Aall, Professor of Philosophy in the University of Oslo, for their valuable assistance in the inception of this work. I am especially grateful, also, for the inspiration and coöperation of Dr. Frederick Barry, Professor of History of Science in Columbia University, and Mrs. Barry.

MARY MILLS PATRICK

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INTRODUCTION

Before entering upon the definite study of Greek Scepticism, a brief outline of the subject seems desirable.

Scepticism among the Greeks developed in two distinct lines:

I. The first of these was called Pyrrhonism and originated with Pyrrho of Elis, in the fourth century B.C. This furnished the impetus for the later growth of both forms of Scepticism. Pyrrhonism as an organization subsided in Greece shortly after the death of its founder, but revived after more than a century and flourished again in Alexandria and other places until the beginning of the third century A.D.

II. The other line of Scepticism began in Athens, in Plato's Academy, early in the third century B.C. This was shortly after the original movement of Pyrrhonism came to an end in Greece. The influence of Scepticism in the Academy was very strong during the whole period in which Pyrrhonism was in abeyance, but gradually declined in power as Pyrrhonism again came into the foreground.

Thus we find that a strong movement of Scepticism influenced the thought life of the Greeks in one or the other of these two distinct lines for more than five hundred years, i.e., from shortly after the middle of the fourth century B.C. to the early part of the third century A.D. The first of these types may be characterized as empirical, and the second, as speculative Scepticism.

The development of the sceptical outlook coincided with that of philosophy in general in Greece. This is evident from a study of the theories of the early thinkers in Ionia and Greece. From the beginning, philosophical doubt was a decided element in their teachings.

The Scepticism that became the acknowledged standpoint of two distinct movements contained elements of originality that had not been found in earlier philosophical theories. Both movements were characterized in different ways by a questioning attitude toward all the positive teachings of their time that was similar to the methods of thought in modern science. Both possessed elements of originality in their critical methods that were remarkable. Thus, while we find historical explanation of many of the theories of both types of sceptical teachings in the earlier thought of the Greeks, in both cases new elements were added. Both schools advocated open-mindedness and discrimination in thinking, and a development of the critical power regarding philosophical and scientific teachings. There was in each a partial comprehension of the relative character of all standards of knowledge. Both expressed doubt regarding the possibility of finding ultimate truth. The Scepticism of the Greeks pertained to their theory of knowledge, and as ultimate truth had not thus far been found, they proposed suspension of judgment for the time being, with an open mind toward future discoveries.

Pyrrhonism was founded in Greece by Pyrrho of Elis, who lived about 365 to 275 B.C. His aim was to find a way ably and adequately to meet the conditions of life. In his search for truth he employed the method of opposing arguments to each other on both sides of a question. As he did not find any arguments supporting the philosophical theories of his

time that could not be refuted in this way, he proposed the method of suspension of judgment, or *epoché*, in regard to all philosophical teaching. As a psychological result of suspending judgment, Pyrrho claimed that *ataraxia* (calmness or tranquillity) would follow. In regard to moral teachings, as he could not find a criterion to judge between right and wrong, he decided to observe the laws and customs of his age. Pyrrhonism never denied the possibility of knowledge, or of new methods of seeking it that might make the finding of truth possible. Pyrrho's theories were well known in Greece during his lifetime. It is not evident how definite an organization Pyrrhonism was in those early days. Timon, Pyrrho's successor, is said to have taken his place, which implies some recognized form of school. Pyrrhonists, however, objected to being called a school or a sect, and preferred the more elastic name of a "movement."

The method of the Pyrrhonist was pragmatic. He did not deny or affirm the truth of existing ideas, but tested them, by placing one argument in opposition to another. The object of the Pyrrhonic method was to investigate ideas gained through sense perception and to prove their limitations. The genetic relation of human beings to the lower animals is made prominent by illustrations showing careful study of animal psychology. The critical writings of Pyrrhonism take up in detail the doubts and problems connected with what is called knowledge, or truth.

After Pyrrhonism died down in Greece, it slowly developed again in Alexandria, at first without any distinct organization. It maintained a certain degree of leadership in the progress of science, and was the historical cause of the Empirical sect of medicine. Its followers allied themselves with scientific rather than metaphysical interests during the

period of greatest vigor in scientific research in Alexandria. Pyrrhonism was closely connected with the progress of medicine in Alexandria, and many of this group were physicians and belonged to the Empiric and Methodic sects of medicine.

The "truth" was often interpreted in the post-Socratic schools as able to prove what things are by nature good and what things, bad. The Pyrrhonist asserts that thus far nothing has been proved either good or bad in itself. He does not suffer as he would otherwise from not having found the truth, because he still seeks it. The aim of all the post-Socratic schools, the Stoics, the Epicureans, and the Sceptics, was to find the highest good in some form of well-being. *Ataraxia*, or the kind of well-being described as the aim of Pyrrhonism, was, however, distinctive. Suspension of judgment is followed by *ataraxia*, a form of well-being which cannot be challenged, as its psychological basis is secure. The attitude of the true Pyrrhonist was possibly more allied to that of modern science than to philosophy. Pyrrhonism was strong in its teaching of the partial character of all results in research and the lack of any evidence of ultimate truth. The Pyrrhonist, therefore, suspended judgment regarding results of investigation in all directions, and never denied or affirmed the possibility of ultimate success—he waited to see.

The sources of our knowledge of early Pyrrhonism are obscure, and require critical investigation of early historical records. A survey of these is given at the end of the chapter on Pyrrho. Sources of the later history of Pyrrhonism are easier of access. They are found in the literature of the Greeks originating in Athens, Alexandria, and other parts of the Greek world, from the beginning of the third century

B.C. onward, with assistance from the Roman literature of the same period.

Our knowledge of later Pyrrhonism is greatly augmented by a study of the books of Sextus Empiricus. These books contain collections of public lectures delivered in the Pyrrhonic School by Sextus Empiricus and earlier Pyrrhonists, but they give us very little exact information about the writer. We know that he lived about the end of the second century A.D. and was possibly an early contemporary of Galen. His headquarters were probably in Alexandria, where Pyrrhonism had its permanent seat after its second appearance as a distinct movement. He was a physician and the next to the last leader of the Pyrrhonic movement.

The extant works of Sextus Empiricus were translated into Latin at some period of the Middle Ages, and are found in both Latin and Greek in old European collections, especially in libraries containing old manuscripts, like those of Monaco, Venice and Florence. The editions of Peter and Jacob Chouetus of Geneva or Orleans date back to 1621. The text of J. A. Fabricius, compiled in 1718, which was prepared by careful consultation with existing manuscripts and gives the text in both Greek and Latin, is considered reliable. Immanuel Bekker published the works of Sextus Empiricus in Berlin in 1842, in the original Greek. There is much in the writings of Sextus Empiricus that finds a parallel in the methods of modern science.

Pyrrhonism in its second appearance developed into a system. The ten Tropes, or modes of thinking, of Pyrrhonism, some of which date back to Pyrrho, grew up during that period. They are more empirical than metaphysical in character.

Our sources of knowledge regarding Academic Scepticism

are comparatively simple and direct. They are the records of the Academy, the books of Cicero and other Greek and Roman writers after the third century B.C., and the works of Sextus Empiricus.

Academic Scepticism started out with the same thesis as Pyrrhonism, but developed in a speculative rather than empirical line. While Pyrrhonism was in the beginning comparatively unsponsored, Academic Scepticism had behind it the influence and authority of the leading school of philosophy and all the resources of its metaphysical teaching. During the time that Pyrrhonism was gradually becoming active in Alexandria, under the influence of the scientific and medical environment there, Scepticism in the Academy grew through metaphysical discussions. It was also greatly promoted by the oratorical power of its two presidents, Arcesilaus and Carneades, who were leaders in Academic Scepticism.

The first of these, Arcesilaus, 315 to 241 B.C., was a late contemporary of Pyrrho and President of the Academy. His Scepticism was near to the ideal of Pyrrhonism, and was claimed by some critics to be identical. He made Scepticism the acknowledged basis of Academic teachings by the power of his prestige and oratory, and when he introduced it as the platform of the leading school of philosophy in the world, he claimed that the Academy was going back to the teaching of Socrates. Arcesilaus was the originator of the idea of the *eulogon*, or reasonable, as a basis of ethical discussions. He claimed that as the truth itself is not known, apparent distinctions between good and evil can be based upon that which appeals to the reason. This was consistent with the teaching of Socrates that virtue is knowledge. Ethical distinctions could, therefore, never be complete or final, but standards of

knowledge and virtue would grow together on the basis of that which is reasonable.

The influence of the Academy was far-reaching, and branches of the school were established in Rhodes and elsewhere. Teachers from the Academy went to many of the cities of the Greek world. The school was represented by a strong contingent in Alexandria which never united with the Pyrrhonists as long as Scepticism was the basis of the teaching in the Academy.

The second great sceptical leader of the Academy was Carneades, who was an even more distinguished orator than Arcesilaus. He was President from about 164 to 137/6 B.C., and was the leader of the philosophers who went as delegates from Athens to Rome on the well-known political mission in 156 B.C. His orations in the Roman Forum had a world-wide significance, and the visit of this embassy was the beginning of the influence of philosophy in Rome. Like his predecessor, Arcesilaus, Carneades denied that a criterion of knowledge could be found. But when asked for a criterion in the practical conduct of life that would lead to the attainment of well-being, he proposed three degrees of probability as a guide to conduct, which have become famous, and upon which research in many lines of knowledge has since been based.

The Pyrrhonists asserted that, from the first, Academic Scepticism failed to be complete in character because it denied the possibility of final knowledge, which they themselves never did. Arcesilaus, Carneades and their followers were, for this reason, accused of dogmatism. The theories of the "reasonable" as a basis of ethical judgment, and degrees of probability as leading to standards in conduct, were attacked by the Pyrrhonists as dogmatic and not sceptical.

The best authorities among the ancient writers, however, show that neither Arcesilaus nor Carneades gave up his Scepticism regarding knowledge.

In the first century B.C., Scepticism as the regular platform of teaching in the Academy came to an end. Its influence as the avowed philosophical method of the Academy could not so easily and quickly end.

There was a man in Alexandria in the first century B.C. of great power as an original thinker who was an Academic Sceptic. His name was Aenesidemus. This man was apparently overwhelmed at finding his philosophical method of thinking renounced by the school to which he belonged. He, therefore, turned to Pyrrhonism and was able to bring it into prominence as an organization and to secure data regarding its history.

Aenesidemus was originally a teacher of philosophy and not a scientist. When the Academy gave up its sceptical platform he joined the Pyrrhonists and immediately devoted his unusual mental gifts to writing in defense of the object of his new allegiance.

Aenesidemus formulated the ten Tropes of Pyrrhonism (the so-called "Tropes of Suspension of Judgment"), which are nearly all of them decidedly scientific in character and illustration, and thus show evidence of their earlier origin. He could not have originated these Tropes, as they are not at all according to his style of thinking. We discover that fact from a comparison of the "Tropes of Pyrrhonism" and those "against Aetiology" of which he was the undoubted author. The latter Tropes were eight in number and discuss the reality of cause. The style of reasoning in the "Tropes against Aetiology" is more in character with Academic than with Pyrrhonic thinking.

The power of the dialectic of Aenesidemus added greatly to the weight of Pyrrhonic discussions. His eight Tropes, or arguments, against the idea of cause as fundamental are quite modern in their point of view. They may be said to confute the old belief that "the processes of nature are held in bondage to certain fixed ends which they must tend to realize," almost in the method of modern thinking. (John Dewey, *Reconstruction in Philosophy*. New York, 1920, 68.)

The example of Aenesidemus affected the methods of discussions in the Pyrrhonic School for some time. Subsequent Tropes were framed quite in the style of Academic discussions. It is highly probable that many other prominent Academic Sceptics besides Aenesidemus joined the Pyrrhonists, not only in Alexandria, but in Rome and other places.

Before the time of Sextus Empiricus, however, Pyrrhonism regained its empirical point of view through its close connection with medicine. It was modified in various ways by political conditions, during the later centuries of its existence, and gradually came to an end as an acknowledged movement at the beginning of the third century A.D.

PART I

ORIGINS OF SCEPTICISM IN GREEK
PHILOSOPHY

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CHAPTER I

EARLY PHILOSOPHY IN IONIA

Greek Scepticism originated among a people much given to discussion, and sceptical inquiry may be traced to the earliest period of Greek Philosophy. We find this tendency to doubt in the sayings of the first scientific writers, or philosophers, so called, among the Greeks; in the teachings of the Sophists; and even in those of Socrates himself. Scepticism did not develop as a system until the fourth century B.C., but from that time on, it existed in different specific forms for more than five hundred years. It was many-sided in its influence, approaching other lines of teaching in numerous ways, and owed its development to the lectures and writings of distinguished men. Many of the latter have been lost, but the general phases of Scepticism can be traced in their origin and development with a satisfactory degree of distinctness.¹

Greek Philosophy was comparatively original. Its first recorded teachings are so simple and independent that they appear quite evidently to have been the first effort of the people in that direction.² Philosophical ideas developed surely and steadily on this foundation. In systems of thought as important as the Ionian physics of Heraclitus and the theories of the Atomists, the stamp of originality is evident.

Both Greek Philosophy and Science started under the shadow of religion. The Greeks in their earliest historical period connected all research with a psychological middle

standpoint in a simple world theory. The picture given by Homer of the kingdom of the gods was their starting point. They visualized a group of gods and goddesses to whom the creation of all that existed in heaven and earth could be traced. It was to a certain extent a religion of nature, for nature controlled even the gods and goddesses. It followed, therefore, that he who could best develop his natural powers was the most godlike.

This occasioned a freer relation between speculative thought and religion than existed in other ancient nations. Each one could offer his own sacrifices to the gods, and, as he approached the altar, he could express his own individual desire. There were no dogmas to confuse the mind, and, what was still more remarkable, there was no hierarchy. The religion was one of worship, and the position of priest conferred more honor than it did power.³ There was freedom of thought and of research. There was apparently one way only in which the scientist or the philosopher could come in conflict with the popular religion; public opinion demanded respect for the gods and goddesses, and any failure in that line met with immediate retribution.

Naturally, however, as intelligence increased, one of the first results of freedom of thought was doubt regarding the existence of the group of gods and goddesses on Mount Olympus, and a demand for higher principles of thought and action than they supplied. The growth of that particular form of doubt was, however, gradual, and philosophy and science had free scope. The aesthetic beauty of the religion, as expressed in the unique development of Greek art and poetry, naturally furnished a common basis of union between the masses who believed in the gods and goddesses,

and the philosophers and scientists who had begun to doubt. The fact that the religion itself was largely the result of the creative imagination of the people unconsciously furnished a common bond.

Philosophy, starting on such a basis, was from its very birth free and self-dependent and bears an altogether national stamp. Important allies to the early religious influences in philosophical growth among the Greeks are to be found in many other circumstances. The unusual endowment of the Greek nation and the stimulus provided by its situation and history produced moral, political and artistic results that worked together in a remarkable manner to shape religious and philosophical speculations.

It is well known that the early development of the Greek nation, especially in relation to its language and religion, was under the influence of the Oriental spirit, but this influence was felt most strongly in earlier ages, before Greek Philosophy began. There was always more or less contact with the East, either by way of the Bosphorus and Thrace, or by Egypt through the islands of the Aegean; but ideas received from other countries, while they were an incentive to Greek thinking, produced results that appeared in new forms under new conditions. Although it is a fact generally accepted in the history of thought that new movements are almost invariably suggested by someone outside who is not the founder of the movement, it is certain that neither oriental nor Egyptian thinkers endowed Greek tradition with its peculiar atmosphere; but it is equally certain that their theories were not unknown to the Greeks. The fact that early Greek thinking was strengthened by incentive from abroad increases rather than lessens its power of originality. The problem of the relation of Greek Philosophy

to sources outside of Greece narrows itself down, therefore, to the question of how much was borrowed.

Early Interchange of Ideas in the Eastern Mediterranean

The relation of Indian thought to Greek Scepticism will be taken up in dealing with Pyrrho, but possibly the interchange of ideas among the cities of Egypt, Syria, Persia, Asia Minor, the Islands of the Aegean, Greece and Southern Italy must be reckoned with in connection with all development in Greek Philosophy. One is likely to forget how easy a matter it was to put up a little bread, honey, and cheese, with a few figs and olives, in the large handkerchief of the time, and to set sail in one of the cargo boats that always dotted the horizon in the eastern Mediterranean, and thus to visit one after another of the Aegean Islands, and then float idly on to Phoenicia and Egypt.

Even as early as 650 B.C., before the time of Amasis, the Greeks had a colony at Naucratis, in the delta of the Nile,⁴ and in the time of Alyattes, the father of Croesus, the Milesians were called the masters of the sea.⁵

The well-known Russian archeologist, Professor Farmanovsky, has recently discovered the ruins of the ancient Milesian colony of Olvia, at the mouth of the river Bug, in Southern Russia. According to the opinion of the discoverer, these ruins date back to the sixth century B.C.

Other parts of the Greek world were not far behind Miletus in their trade with colonies to the north and south, and with all the towns on the shores of the Aegean. Inspiration in philosophy and religion may have come from many directions, but it is to Egypt principally that we turn to seek cer-

tain sources of Greek thinking. Cordial relations between Greece and Egypt are indicated in many ways, and especially by the fact that those who wished only to trade with Egypt, and did not desire to settle there, were given sites where they might erect altars and temples to their gods. Travelling back and forth between the two countries was evidently very common.⁶

The relative estimate of time was so different in those days that weeks spent in travel were not measured in modern terms. Thales and Pythagoras or any of their friends could sit leisurely under the bulging sail of a cargo boat, and drift lazily from Samos or Miletus southward, as naturally as one now occupies a sleeper from Chicago to New York. Egyptian priests say in their holy books that Orpheus, Musaeus, Homer, Diodorus, Lycurgus, and Solon visited them, thus mixing the mythological with the historical in an interesting manner. It is well known that Democritus and Plato were among those who visited Egypt.

The most reliable evidences of a remote past in Europe are found in the islands of the Aegean, which were open to the Greeks before Asia Minor, and from which came many of their able thinkers. The intellectual activity of an age that produced Sappho and Thales — the late seventh and early sixth century B.C. — would prepare the way for the beginning of philosophical development among the Greeks, with the help of all that could be learned from the countries accessible to them. There was also intercourse with lands not situated directly on the shores of the Eastern Mediterranean. The constant presence of Eastern people in Asia Minor, even until a period comparatively late in Greek Philosophy, is not to be forgotten.

Plutarch, in his life of Alexander the Great, refers casually to the Persian Magi who were in Ephesus when the temple of Artemis was burned, which coincided by chance with the date of the birth of Alexander. He uses the expression, "all the Persian Magi," as if they were in Ephesus as a matter of course.

The Earliest Forerunner of Scepticism in Greek Philosophy

The earliest Greek philosophical thinker whom the Sceptics claim as their forerunner was Xenophanes, of the sixth century B.C. He said that all human knowledge is uncertain.

"There never was nor will be a man who has certain knowledge about the gods, and about all the things that I speak of. Even if he should chance to say the complete truth, yet he himself knows not that it is so. But all may have their fancy. Let these be taken as fancies something like the truth." ⁷

Xenophanes was of the type of the Wise Men in his habits of travelling and he describes in very poetical language the customs at the feasts of his time.

One can almost see the newly swept floor, the shining drinking cups, and the fragrant frankincense in the midst. The guests enter, and garlands of fresh flowers are placed on their heads and delicate ointment passed around in a jar. Before the entertainment of the evening begins, the libations to the gods are not forgotten, and a prayer is made for guidance. On the tables near the guests are yellow loaves, cheese, and honey, while sweet water and wine of delicate bouquet stand ready for the careful mixture, the wine being poured into the water. The altar in the midst is clustered round with flowers. Song and revel fill the halls.⁸

The travels of Xenophanes are supposed to have been mostly limited to Greece, but he mentions, in the extant fragments of his writings, Lydia, Malta, Paros, Syracuse,

Ethiopia, and Thrace, outside of Greece proper.⁹ He is supposed to have spent his later years in Elea, but that is doubtful. He was contemporary for some years (at different periods of his life) with Anaximander, Anaximenes, Pythagoras, and Heraclitus, and is called a student of Anaximander. Heraclitus speaks of him as a man of great learning. As Xenophanes earned his living by reciting poetry, and travelled extensively, the Sceptics were right in attributing a large influence to his teachings during the early period of Greek Philosophy. Timon, the successor of Pyrrho, admired him so much that he put many of his satires in the mouth of Xenophanes.¹⁰

Xenophanes, however, was not altogether a Sceptic, as he had positive theories of his own. He was the first of the Greek philosophers to teach the doctrine of one god, and may be called the first religious philosopher. He lived at the time of the Orphic revival of primitive beliefs which were especially strong in the Aegean Islands, and which we know in the history of Greek culture as a distinctive form of the religious life of the people. His religious views were forceful and critical, and pervade many of the fragments of his writings still in our possession. He was of the type that made philosophy a way of life, and he openly opposed the popular religion. It has been maintained by some that Xenophanes upheld the only real monotheism that has ever been taught. His god was not a god in the usually accepted sense of the word, but if not the same as the world itself, was closely related to the concept of the universe.

Xenophanes is said to have been a disciple of Anaximander, and he shows points of contact with the teachings, as we know them, of that inscrutable philosopher. Anaximander taught that a body distinct from the elements exists from which the elements arise. He is said

to have called this body "the infinite," but in just what form of expression he indicated his idea of the infinite, we do not know. The idea, however it may have been expressed, forms a suitable background for the teachings of Xenophanes.

Why Heraclitus is Quoted by the Sceptics (Sixth and Fifth Centuries B.C.)

In speaking of the roots of Scepticism we cannot omit an historical figure of the first rank, namely, Heraclitus. The general attitude of his philosophy contributed much to the development of Scepticism; namely, the fundamental idea of the eternal flux, that all things are flowing and that nothing abides; that nothing exists in static reality but everything is becoming; that is to say, that the principle of existence is change; and it is in change that real rest is found. In addition to teachings like those given above, we have the direct reference of Heraclitus to the eyes and ears as bad witnesses to men, if they have souls that understand not their language, or, translated a little differently, the eyes and ears are bad witnesses to those who have barbarous souls. In this way Heraclitus gives very simply an analysis of sense perception. It depends on change in the subject as well as in the object, or we may say that it is a reciprocal relation between subject and object. This was interpreted by the Sceptics, however, as simply meaning that sense perception cannot be trusted. The strongest argument for a sceptical attitude, however, given by Heraclitus, was his saying that "good and evil are the same," and his general doctrine of the identity of opposites.¹¹ Therefore, knowledge is uncertain. The Sceptics realized, however, that the ultimate teaching of Heraclitus was positive, and that he was not a Sceptic. They understood that the principles which they

quoted from him as sceptical were used by Heraclitus himself as a basis of a definite world theory. Yet they were right in deducing from him the idea of relativity of knowledge — which opened the way for important philosophical and scientific research in all directions.

There was one element of the practical teaching of Heraclitus with which the Sceptics agreed, and that was his attitude toward law. The importance which he attributed to the laws of the land, although for a different reason from that of the Pyrrhonists, foreshadows their ideas on this subject.

CHAPTER II

DEMOCRITUS, THE PIONEER

(460/59 to 360/350 +)

The figure that stands out as a real forerunner of the sceptical movement is Democritus, since his investigations were preëminently scientific; we cannot doubt that his teachings included many of the elements of later sceptical writings. He was an Atomist and the leader of that movement, although the founder was Leucippus, about whom comparatively little is known. The scientific progress of the period to which Democritus belonged is almost entirely due to him, for he was the leading scientist of the fifth century B.C.

Democritus was born in Abdera, in Thrace, about 460 B.C. He was a contemporary of Socrates, and a younger contemporary of Protagoras, who was also from Abdera. Democritus was still a young man when Anaxagoras was old, and he pursued a startlingly different line of thinking from that of Anaxagoras and Socrates, basing his reconstruction of religious beliefs on scientific, rather than speculative, methods. He was a forerunner of Pyrrhonism in science and likewise in medicine. He was an intimate friend of Hippocrates, the founder of modern medicine.¹ During his early life Hippocrates lived in Cos, an island that was *en route* from Abdera to most of the places that Democritus visited, and Democritus was an inveterate traveller. He evidently had the wherewithal for general travel and investigation, and he was more familiar with the world as it was

then known than were any of his contemporaries. He spent several years in Egypt and was for some time in Babylon. From Babylon, centers of Chaldean and Persian scientific research were accessible, in which places he took part in many discussions. He may have gained more, however, in tolerance and knowledge of the world than in science, for he is said to have found himself stronger in geometry, for instance, than the scientists whom he met.² He also visited Phoenicia, where he found encouragement and inspiration in the development of his atomic theory. His travels occupied about five years of his earlier life, after which he returned to Greece. There he is said to have given his inheritance to the State, in order that he might pursue his investigations undisturbed. He was one of the most prolific writers of his age in science, philosophy and ethics. His style was poetic and clear, and is sometimes compared with that of Plato. He wrote on mathematics, astronomy, geography, grammar, philosophy and ethics. His scientific books included results of his study of animals and plants, and some of them were distinctly technical. Yet, notwithstanding this array of scientific subjects, the larger number of his works were on philosophy and ethics. One of the most significant of his subjects was "the relation of sense perception to thought." It is evident from what we know of his history that his aim was scientific progress rather than personal honor. His books were found in the Library in Alexandria at the time of the Ptolemies. They were extant in the latter half of the second century A.D. and Sextus Empiricus quotes from them constantly, but probably not from direct knowledge.

Although Democritus may be called the one of all others who prepared the way for Pyrrhonism, he was not a Sceptic.

He had a very positive world theory, based on the ideas of empty space and atoms, and the reasoning presented in all of his books was constructive in character. The later Pyrrhonists never considered him a forerunner of total Scepticism, although they realized that they owed to him many of the features of their sceptical theories.

For instance, both Aristotle and Theophrastus testify that Democritus did not seek an intelligent cause for the motion of atoms in his world theory, and also that he probably did not believe in an immaterial soul.

Democritus taught that knowledge is limited, and that he could study phenomena only and not ultimate causes.³ His point of view was that he could not say why things were so, but that he could only study them as they appear to be. He claimed, further, that we cannot know things as they are, as all perception is modified by the bodily organs and the attitude of mind of the one who perceives. He did not deny the possibility of ultimate reality, but separated the idea of reality from existence as we know it. He asserted that knowledge is limited, reality is unknown, truth is hidden, and the understanding changes with circumstances. He based his philosophy on experience rather than on the speculation which many of the Greeks loved.

As to religion, Democritus did not believe in the gods as they were presented by the Greeks. He thought that they originated in the history, or myths, of heroes of the past. His own god was Nature. Democritus, however, never openly protested against the religious teaching of his day, as did Socrates, and he even took part in the temple services.

In ethics, he emphasized the emotional side of life, and presented a positive aim which he called *euthymia*, or the

right tone of our inner life. He believed that the good in our inner life is our nearest approach toward a realization of the divine. His ethical writings show sharpness and discrimination of thought and a very earnest moral standpoint. Happiness is from within, he claimed, and does not depend on flocks or gold, but on the condition of the inner life. Like all the best Greek writers, he placed great stress on friendship. Certain aspects of his ethics were adopted by the Pyrrhonists. He taught *ataraxia*, or calmness of mind, which was the strong point in Pyrrhonism. Democritus also stated that it was best to live one's life through with as much joy and as little suffering as possible, which was the teaching of Pyrrhonism as well. The combination of his ethical theories based on the emotions with a wholly materialistic point of view in science and philosophy was very unusual.

The basic ideas of Pyrrhonism were contained in the books of Democritus. The mechanical explanation of the universe, love of science, doubt regarding the divine character of the gods and goddesses, doubt of ultimate knowledge, denial of the trustworthiness of sense perception, the theory that the highest good, which is emotional in character, is to be sought in the form of *ataraxia*, as a kind of equilibrium in the inner life—all these things were the inheritance of the Pyrrhonists from Democritus.

He used a number of the sceptical formulae, and he is quoted more than thirty times with great respect in the writings of Sextus Empiricus. The Sceptics were quite aware, however, that Democritus held a definite world theory, and that he was not one of themselves, although they recognized their indebtedness to his teachings. They considered that even his use of the sceptical formula "No more" was dif-

ferent from their own, yet the saying of Democritus that was most frequently referred to by them was the illustration of this formula, namely, that honey seems sweet to some and bitter to others, therefore, it is neither sweet nor bitter.⁴

His clear teaching that sense perception does not give us objective reality, was the foundation of many of the sceptical expressions of doubt, for he taught in different ways that we cannot understand the true nature of things.

The scientific tendency inaugurated by Democritus had a strong influence on the beginning of the Pyrrhonic School, to the tenets of which it was far more closely related than to the more metaphysical deductions of the Stoics, and the teleological conceptions of the world so much cherished by the Socratic Schools. The place in history to be accorded to Democritus is perhaps more that of scientist than that of philosopher, for in scientific research he stands as one of the greatest pioneers of the world.

Democritus might be called a materialistic physicist as well as a rationalist. There was much in his teachings that would especially appeal to the Pyrrhonists, and the close tie between them is shown in the history of philosophical development in Greece.

Among the followers of Democritus there seems to have been a primitive society that later developed into Pyrrhonism. This supposition is supported by the story of the way in which Pyrrho came in contact with Democritans.⁵

In the chain that represents the early growth of the sceptical movement, we find an important link in Metrodorus, of the island of Chios, who either studied directly under Democritus or under his disciple, Nessus, thus connecting Democritus with the Sceptics. He was the guide and teacher of

Anaxarchus, from whom Pyrrho received his strongest impulse.⁶ Metrodorus was well known as decidedly sceptical in his tendencies, and he claimed that his theories were based on the teachings of his master, Democritus.

Empirical Doubt in the Healing Art

The general scientific awakening in which Democritus was a prominent figure had its influence on medical progress. The histories of philosophy and of medicine have always shown a certain interchange of thought, and many of the early philosophers were physicians.⁷ During the period when the Greeks believed without question in the gods, the healing art was supposed to be directly carried on by divine power. Important sanitariums were early established at Cos and Cnidus, Cyrene and Epidaurus, and at other places, which were connected with temples to Aesculapius, and the healing of disease was considered the act of this god. In these resorts, all kinds of miracles were recorded, at different periods of their history, on tablets which have been found in excavations carried on in Greece and Asia Minor.⁸

There was, however, in this early period more scientific knowledge of the healing art than has generally been supposed. Even in the places where the so-called divine healing was carried on, there were regular schools of medicine, at a very early time, to which some of the priests themselves belonged. One could be at the same time both a priest and a doctor. In these schools there were several grades of physicians, the highest of which included specialists.

One of the first to inaugurate decided improvement in medical treatment was Empedocles, who was both a physician and a philosopher. He began his reform in the school

at Cnidus, where he tried to replace trust in the gods by healing in more scientific methods.

The beginning of the scientific study of medicine among the Greeks seems to have been in Ionia, as the oldest medical literature known in the Greek language was written in the Ionian dialect. The early development of this science was influenced to some extent by the school of Pythagoras, in Croton, and also by scholars from Thrace.

The great scientist among the early Greek physicians was Hippocrates, the father of medicine, who shared with Democritus the leadership in the science of their time. He was born in Cos, in 460 B.C. He lived to be very old, and died sometime between 377 and 359 B.C. Among his teachers was Herodotus from Thrace, one of whose books was made a part of the Hippocratic Corpus. Another was a teacher of Anaxarchus with whom Pyrrho studied. Hippocrates does not seem to have travelled as widely as his contemporary and friend Democritus, but he must have been well known to the entire Socratic group in Athens, as many of the brilliant thinkers of that and the succeeding period refer to him familiarly. Hippocrates developed far-reaching reforms in medical practice at the time of the greatest progress in Greek history, and put medicine on a plane with the drama, poetry, philosophy, sculpture, painting, and general science. His books were the foundation of the Hippocratic code and became the greatest medical authority for succeeding centuries. They are read even to the present time. The medical practice and teaching of his whole life emphasized to such an extent the protest against trusting to the gods for healing that his book on the subject of diet was sometimes called "The Book Against the Cnidian Theories." Hippocrates lived in a time before philosophy was

definitely separated from other lines of research, and did not belong to any fixed school, as did physicians of a later period. He was intimate with Democritus and also with Gorgias, and probably, like Socrates, leaned towards the position of the Sophists who did not form a separate school of philosophy. Sophistical and rhetorical chapters are found in his books. About seventy-two treatises on medical and scientific subjects, in the Ionian dialect, bear his name and constitute the Hippocratic Code. Editions of these books were made down to the middle of the fourth and third centuries B.C. They were early taken to the Alexandrian library and given a prominent place in the medical section, under the name of Hippocrates. Even in the time of Aristotle, however, the books attributed to him were a mixed collection, and there is uncertainty as to the authorship of most of them. They stand as the "Hippocratic Corpus," but no matter who wrote the majority of them, they do honor to the distinguished founder of medical science. All of these books are characterized by respect for the profession.⁹

After Pyrrhonism ceased to be an acknowledged movement in Greece, it gradually appeared again among the physicians in Alexandria, and other parts of the Greek world. The two schools of medicine, to one of which the Pyrrhonists usually belonged, were the Empiric and the Methodic, both of which are well known. This association of Pyrrhonism with medicine continued until the movement came to an end in the beginning of the third century A.D.

Both the Pyrrhonists and the medical sects contemporaneous with them were eager for progress in science. Their sceptical teaching in its relation to knowledge may be called, in a certain sense, a preparation for the general scientific idea of development, much later elaborated as the basis of our

present conception of world history; for the result of their seeking and questioning was an ever improving type of truth.

With reference to this philosophical and medical background, we can attempt an estimate of the influence of science on the sceptical movement.

CHAPTER III

SOCRATES AND THE SOPHISTS

(Fifth and Fourth Centuries B.C.)

Another class of thinkers arose, whose influence was strong in determining the development of Scepticism, and these were the Sophists, of whom Socrates was one. Among the influences that produced the Sophists, the Eleatics, of the sixth century B.C., were a strong element. They were the first to formulate the opposition between sense perception and reason, appearance and reality. By the invention of the method of dialectic, they furnished the Sophists, and, later on, the Sceptics with a strong weapon. Gorgias, the Sophist, was a direct product of the influence of the Eleatic School. Timon recognizes the inheritance from the Eleatics in his writings, as he often praises Parmenides and Zeno. There was a direct historical connection between the Eleatics, the Sophists, and the Sceptics. The Sophists did not organize a school of definite theories, but they were individual thinkers, whose period was characterized by a tremendous urge for freedom and power. The larger field of thought discovered by Democritus was entered by them through a different path. In the fifth century B.C., a man named Anaxagoras, from Clazomenae, at the head of the Gulf of Smyrna, had brought a wholly new element into the thought of his time, namely, the idea of a force which he called *Nous*, or mind. This idea, which Anaxagoras struggled to

bring to birth, had been thus far unknown in Greek philosophical speculation. It is not found in the fragments of Heraclitus and Empedocles, and even in the Orphic tendencies of Xenophanes and Pythagoras was not the basis of an immaterial metaphysic.

From the new point of view, "Man is the measure of all things, of things that are that they are, and things that are not that they are not." The Sophists called themselves the physicians able to treat ignorance, and to bring about knowledge in its place.¹ They were the forerunners of the Sceptics in showing independence of thought, and also in not dealing directly with public welfare. Though their teachings led in a certain sense to a peculiar type of political interest, problems of statesmanship were not their first concern. This holds good at any rate for the earliest Sophists.² We find here an analogy to the attitude of the Pyrrhonists of indifference toward political affairs. Of all the Sophists, Gorgias (483 to 375 B.C.) is the most closely allied to sceptical thinking. With the help of Zeno's dialectic, he gives his three well known statements: i.e., Nothing exists; If anything exists, we could not know it; If we could know it, it could not be communicated.³ In their general moral influence we cannot call the Sophists the forerunners of the Sceptics, for the latter always taught the observance of the moral laws of the community, while the former did not. In the period when the Sophists arose, it would appear that the existing moral laws were gradually undermined, as no general principle of truth was established, and no universal law of conduct maintained. While, however, the influence of the Sophists on the Sceptics was not in the direction of changes in the moral law (as the Sceptics always accepted the existing laws without criticism), the great upheaval of

thought in their time formed a ready basis for the sceptical movement. As the Sophists never presented a logical system of any kind, their contribution to later and deeper thought was chiefly suggestive. Their arguments were given without logical sequence and without attention to any psychological method. While Protagoras and Gorgias proposed some of the principal reasons for a sceptical attitude of mind, they furnished only suggestions for a philosophical system. Nothing that the Sophists gave the world could be the basis of the delicate psychological analysis of association of ideas given by Carneades in his theory of probability, during the sceptical period of the Academy. Aenesidemus, in the Pyrrhonic School somewhat later, arranged his Tropes methodically and logically. The critique of the idea of being by Gorgias is far inferior to the critique of the idea of cause by Aenesidemus.

The Sophists were largely occupied with the practical results of their doctrines. They were professors of rhetoric, and doubt was to them a means of livelihood. To Pyrrho it was an end. By the Sophists, teaching was commercialized for the first time in the history of Greek Philosophy. This spirit was not, however, a characteristic of Pyrrhonism or of Scepticism in the Academy, as neither of these movements had a commercial aim. We can certainly affirm, nevertheless, that much that was worthwhile in Greek Scepticism was inherited from the Sophists. They were prominent at a period of great influence, when Pericles and his wonderful contemporaries, Anaxagoras, Hippocrates, Phidias, the tragedians, and others made Athens a brilliant center of cultural life. The Sophists certainly contributed many suggestions to the later development of sceptical thought.

The Scepticism of Socrates (469 to 399 B.C.)

In the history of thinking, a still greater step forward was made by Socrates. This man, undoubtedly the most prominent teacher in Greece, has many points of contact with the spirit of the sceptical movement. To quote his own words, in the *Apology*:

“Strange, indeed, would be my conduct, O men of Athens . . . if now when I conceive and imagine God orders me to fulfil the philosopher’s mission of searching into myself and other men, I were to desert my post through fear of death or any other fear. . . . For the fear of death is, indeed, the pretence of wisdom, and not the real wisdom, being the pretence of knowing the unknown, and no one knows whether death, which men in their fear apprehend to be the greatest evil, may not be the greatest good.”⁴

The method of Socrates of eternal questioning tended to encourage the sceptical attitude and is well illustrated in the Platonic dialogues where he is continually represented as opening discussions in which the final outcome of every problem presented is left undecided. The teaching of Socrates might well excuse the Sceptics for considering him partly a Sceptic himself. Whenever he attempted to analyze concepts, he employed a method of dialectic that might easily confuse his audience as to his aim. Close attention was needed to distinguish the purpose of arguments as subtle and apparently as capricious as those of Socrates. They might be interpreted in exactly opposite ways. It is not surprising that some of his contemporaries — as, for example, Aristophanes — were deceived by him. He began most of his statements with the assertion that he knew nothing, and his plan was certainly to seem to doubt everything, without venturing to assert a positive opinion.⁵ It was his

habit of doubt, or, at least, of appearing to doubt, that appealed to the Sceptics to such an extent that both the Pyrrhonists and the Sceptics in the Academy regarded him with great respect. In its sceptical period, both Arcesilaus and Carneades professed to lead the Academy back to Socrates, and Sextus Empiricus refers to him constantly in his writings. Arcesilaus and Carneades largely ignored the statements of Socrates regarding the divine and the existence of the gods, but the Pyrrhonists denied that Socrates was a Sceptic because of his definite teachings on this subject. They admitted, however, that Socrates stood next to Xenophanes as a forerunner of Scepticism. The speculative Scepticism of Socrates was more closely allied to the methods of the Academy than to the scientific point of view of Pyrrhonism. The Academy, even in its most sceptical period, never gave up the claim that it represented a continuation of the teachings of Socrates. Moreover, Socrates was generally considered a true exponent of the highest type of life, a human being who preserved calmness and poise of spirit, and who was undisturbed by the prevailing conceptions of the people regarding life and death, and all questions connected with them. The concepts which he most frequently discussed were moral ones, such as, for instance, virtue, justice, and piety. In these discussions, practical values often seemed to be what he was seeking. When he suggested that arithmetic and geometry be studied only so far as they proved practically useful, he used almost the same language as was later employed by Sextus Empiricus on this subject, although speaking from a different standpoint. Neither the Sceptics of the Academy nor the Pyrrhonists seemed to realize, however, that the undermining of the moral law by the teachings of the early Sophists had led to its being placed on a

new and much higher basis by the greatest of all Sophists himself.

In the general attitude of Socrates, the principles of personal independence and freedom were graphically illustrated, and this attitude was cultivated by all subsequent schools. The Epicureans looked to pleasure to give them freedom, and the Stoics, to wisdom, but the Pyrrhonists sought freedom of spirit in the state of *ataraxia*, rightly claiming that Socrates was the best exponent of tranquillity.⁶ The basis of tranquillity of soul which Socrates sought was found in his search for the highest good. The Pyrrhonists, in referring to Socrates as their ideal, did not do so in regard to his attitude toward the existence or non-existence of good or evil, but sought only to attain a similar degree of tranquillity.

After the death of Socrates, a group of his followers joined Euclid of Megara, and were later called the Megarians. Like the Eretrians, they developed originally through the influence of the Eleatics. One of Pyrrho's teachers was Bryson, who was probably a student of Euclid of Megara. Many years later Timon also went to Megara to study under Stilpo. We see, therefore, that many of the thinkers who were directly influenced by Socrates, in turn influenced Scepticism. It was to these men that the Sceptics owed the development of the method of dialectic which was one of their strongest weapons. The method of Aenesidemus, the Pyrrhonist of the first century B.C., in his Eight Tropes Against the Philosophy of Causality, reminds us of the ancient form of procedure of the Eleatics. The Five Tropes of Pyrrhonism of Agrippa showed the same characteristics.

The contention of the Megarians against the idea of reality in the world of change was especially attractive to the

Sceptics. Euclid of Megara, furthermore, in giving the theory of relativity of knowledge a strong place in the discussions originating in this school, led up to the denial of a criterion of truth.

Thus, there existed through all the great philosophical systems of the Greeks a critical spirit ready to question the possibility of knowledge and to doubt the results of philosophical research.

PART II

EARLY PYRRHONISM

CHAPTER IV

PYRRHO OF ELIS

It is often the experience of those who teach new truth, or who discern the path leading to freedom of thought, to pass through a period of inner doubt. The same thing may be seen in the history of movements of thought. A questioning trend in philosophy, science, or religion frequently prepares the way for a new departure. An analytic study of Greek Scepticism reveals the influences which combined to develop this tendency, and also shows that it was an important step in bringing about the conditions necessary for the progress of thought in all directions.

Speaking broadly, we recognize among the Greeks three Sceptical Schools, or groups of those sceptically inclined:

- I. The School of Pyrrho of Elis and his immediate followers.
- II. The so-called Middle and New Academy.
- III. The later Scepticism of Aenesidemus.

A more technical division would be the following:

- I. Empirical Pyrrhonism: Pyrrho and Timon.
- II. Scepticism in the Middle and New Academy: that of Arcesilaus and the Scepticism of Probability of Carneades.
- III. Dialectic Pyrrhonism: Aenesidemus and Agrippa.
Empirical Pyrrhonism: Sextus Empiricus.¹

Pyrrho of Elis has always been regarded as a leading influence in the development of Greek Scepticism, and the father of the movement known as Pyrrhonism.² He is called the author of that distinct philosophic attitude of thought which bore his name for five centuries after his death, and which had an acknowledged existence as a philosophic tendency for a greater part of that time. Centuries after he lived his followers used his name in the titles of their books, as seen in the writings of Aenesidemus and Sextus Empiricus. The former wrote eight books of *Pyrrhonic Discourses* as well as *Pyrrhonic Sketches*, and the latter, three books of *Pyrrhonic Sketches*.

Pyrrho is one of the many Greek philosophers whose real theories are somewhat difficult to disentangle from the snarled threads of tradition. He is pictured by his contemporaries and by Cicero as a severe moralist and by all Pyrrhonists as the source of the empiric sceptical tendency of their school. Historical sources of information regarding his teachings are few and often obscure.

Historical Environment

Before entering upon a critical analysis of the details of Pyrrho's life and teachings, let us consider briefly his historical setting. Every man is better understood when pictured in the country where he lived, surrounded by a group of his contemporaries.

Pyrrho of Elis, the founder of Pyrrhonism, was a striking figure. He must have been born about 365 B.C., as he is said to have lived to be ninety years old, and his death took place, according to the best authorities, between 275 B.C. and 270 B.C.³ He enjoyed the privileges of travel and of

meeting distinguished people more than was customary in his time. He was a friend of Alexander the Great, with whom he travelled to India and other lands. He was the pupil of Anaxarchus, one of his fellow travellers, who was, himself, an intimate companion and adviser of Alexander, and who had such an even temper and lived a life so tranquil that he was called "The Happy." In the journey to India, Anaxarchus must have created an unusual atmosphere, for he was one to whom men turned, and one who found it easy to reprove them and bring them to a more temperate life. Another distinguished man in their group was Ptolemy I.

In Greece, in Pyrrho's day, new schools of philosophy were coming into existence. Aristotle was contemporary with Pyrrho in the early life of the latter, and the Lyceum was opened in the eastern part of Athens when Pyrrho was about thirty years old. Long before Pyrrho died Zeno had founded the school of the Stoics in the Stoa Poikile, the Painted Porch, and he may have been heard there by Pyrrho himself. Epicurus, whose name stands in all languages for a definite type of thinking, had bought his garden, outside the walls of Athens, on the way from the city to the Academy, where he established his school. He is said to have admired the manners and conversation of Pyrrho. Arcesilaus, who definitely introduced Scepticism into the Academy, was a contemporary, although about fifty years younger. New Greece, with its art transformed by Phidias and his followers, its thinking inspired by Democritus, Socrates, and Plato, and its theatres voicing the genius of the great tragedians, formed a recent historical background to the life of Pyrrho. As Pyrrho sailed away from the Piraeus to join Alexander the Great on his journey to the East, far out at

sea glimpses of the shining marble of the new creations on the Acropolis must have seemed like a message of farewell. On his return, eager to reach his native land, while still at sea his first view of this wonderful vision was his welcome home.

The Life of Pyrrho (365 to 275 B.C.)

Pyrrho was born at Elis, and was the son of a certain Pleistarchus, or Pleistocrates. Pausanias says that his father was a Sophist named Pistocrates.⁴ He was poor, and in his early years pursued the art of painting, followed by a definite study of poetry. One of his paintings, a picture of some torch-bearers, considered fairly good, was preserved for some time in the gymnasium at Elis.

“At the end of the fourth century the Peloponnesus was the scene of a great bloom in the art of painting which flourished most brilliantly in the city of Sicyon. Here for twelve years Apelles, master of grace and realism, worked before he went to the court of Macedon. Pausias of Sicyon, fellow pupil of Apelles, was noted for the development of encaustic painting, and for his study of perspective. These are the most important names of a school that was large in numbers, long in duration, and broad in its artistic influence. For Pausias and Apelles were pupils of Pamphilos, who emphasized the technical side of his art and the special need of the painter for a knowledge of arithmetic and geometry. And Pamphilos in his turn had been a pupil of Eupompos of Sicyon. The fact that Apelles came from Ionia to prosecute his artistic studies at Sicyon is sufficient testimony to the fame of the Sicyonian school. But noted artists were also working contemporaneously elsewhere, among whom the most famous was Euphranor of Corinth, a master at coloring marble statuary. Euphranor early went to Athens and became a member of the Attic school of Aristides. At this period painting seems to have rivalled sculpture in the bril-

liance of its artists, in the beauty of conception of its themes, and in the mastery of their technical execution. Certainly at the court of Alexander, Apelles was no whit inferior to Lysippus in the beauty, originality or popularity of his works." (T. Leslie Shear, Princeton University: Written by request.)

We should infer that Pyrrho knew Apelles well, on account of his profession, and likewise because of their mutual acquaintance with Alexander the Great. Apelles held the position of Court Painter, and was the only artist whom Alexander would allow to paint his portrait. In subsequent Pyrrhonic literature Apelles is referred to with comparatively intimate knowledge. Sextus Empiricus tells an amusing story of how Apelles tried to paint the foam at a horse's mouth, and failed. He then became angry and threw the wet sponge with which he had wiped off paint at the horse's mouth. Whereupon, there appeared an excellent picture of foam.⁵

Pyrrho's influence during this period of his life was limited, as his father's family was not sufficiently known to bring him into circles of prominence. He found time, however, to study the literature of his people and enjoyed reading the teachings of Democritus. He also, like many of his contemporaries, devoted himself to Homer, whose books he often read from beginning to end, and from whom he frequently quoted in his lectures.⁶ He was not without scientific interests, for he spent much time in studying the habits of insects, birds, and animals, whose characteristics he often compared to those of the people around him.⁷ He took the further step of writing some modest verses, and is reported to have composed a poem to Alexander the Great, for which he is said to have received a thousand gold pieces.⁸

It is evident that Pyrrho, even in his early years, was a man of unusual intelligence. While still young he became

interested in philosophy, which was an easy matter in Greece in those days, as philosophical discussions were carried on at every corner. Later he pursued this subject more seriously.

We have the assertion of Diogenes that he was a pupil of Bryson, the son of Stilpo the Megarian, which is quite unlikely, as Stilpo was much younger. Suidas mentions a certain Bryson who was the teacher of Pyrrho, but does not call him the son of Stilpo.⁹ He speaks of him also as a contemporary of Pyrrho, and says that Theodorus, the atheist, studied under Pyrrho and Bryson, and learned indifference.¹⁰ Suidas states in two places that Bryson was Pyrrho's teacher, and he further states that some people say that Bryson was a disciple of Socrates, or Euclid, and also that he was from Heraklia. Suidas speaks of Phaedo's school which was afterwards called Eretrian, and goes on to say that Menedemus of Eretria, the founder of the new Megarian school, was one of Pyrrho's teachers. As Pyrrho was born in Elis and lived there during the greater part of his life, it is evident that he would be familiar with the teachings of the school of Phaedo established in that city, but that Menedemus was his teacher is doubtful, as from calculations based on the chronology given by Diogenes, Menedemus was considerably younger than Pyrrho.

The two authenticated teachers of Pyrrho were the unknown Bryson and Anaxarchus. From the former he learned the subtle dialectic of the Megarian school, which naturally led to a sophistical Scepticism; by the latter, he was initiated into the teachings of Democritus, which were always the controlling influence in his thinking.

While still in Elis, Pyrrho had the opportunity of gaining familiarity with the Elean and Megarian criticism. He had for some reason already become a warm admirer and friend of Anaxarchus. We do not know, however, where Anaxarchus was when Pyrrho sailed from Greece to join him. With

the slight philosophic preparation thus far attained he embarked for India about 334 B.C. This was perhaps a year after Aristotle founded the Lyceum in Athens and Pyrrho was then between twenty-four and thirty years of age. Diogenes tells us that during his travels he encountered the Gymnosophists and Magi.¹¹ Anaxarchus, as a friend of Pyrrho, supervised his philosophic education regarding Democritus and Protagoras and formed a connecting link between Democritus and Pyrrhonism. Unfortunately, we know very little of Anaxarchus, this strange man so long the companion of Pyrrho, except that he was noted for advocating the principles that Pyrrho later developed into a philosophy of life. The teacher of Anaxarchus had been Metrodorus of Chios, the most distinguished of the younger Atomists, who was called a Sceptic by Galen.

In the army of Alexander the Great, Anaxarchus and Pyrrho occupied the position, common in ancient times, of philosophers in the court of a king.

There were other men of a philosophical turn of mind in the court of Alexander, among whom was Calisthenes, the nephew of Aristotle. Alexander never lost the interest in philosophical speculation that he gained in his youth under Aristotle; he paid great honor to Anaxarchus, and at one time sent fifty talents as a present to Xenocrates, the third president of the Academy.¹²

Anaxarchus had an appealing personality and lived the principles that he professed to such an extent that he gained a strong influence in the army. His temper was even and his life was tranquil, and he was one from whom the soldiers would accept reproof. He was even able to decrease drinking among them and to start a movement in the direction of temperance. Strange to say, he is said to have modified the character of Alexander himself, who had been told many times that he was like a god, and who seemed inclined to believe it. Anax-

archus used the method of friendly jesting about it until Alexander became ashamed of his conceit.¹³

Anaxarchus outlived Alexander the Great, and met with a tragic death in Cyprus, where he had been obliged to take refuge in a storm at sea. There is a doubtful tradition that Nicocreon, the tyrant of Cyprus, ordered him to be put into a mortar and pounded to death with pestles to gratify an old grudge, and that, on hearing this command, Anaxarchus remarked, "Beat the bag of Anaxarchus, but you will not beat Anaxarchus himself."¹⁴

Judging from the story about the poem previously told, Pyrrho appears to have been in favor with the king, but his subsequent poverty does not seem consistent with the statement that Alexander gave him ten thousand gold pieces for his verses. The length of Pyrrho's stay in India is uncertain, but after the tragic death of Alexander he returned to Elis, where he lived with his sister Philista. It is of this period in his life that we have the most vivid picture.¹⁵

Most of the details of Pyrrho's life are taken from sources the authenticity of which will be considered later. These accounts even if not wholly exact, at least show the picture of this remarkable man that existed in the minds of those who had access to the earliest traditions.

It would seem that his conduct and principles were consistent. He did not trust his senses; he never shunned anything, never guarded against anything, and did not fear even "wagons, precipices and dogs." He was often saved from his rash fearlessness by his friends who accompanied him and, as previously stated, lived to the age of ninety.

The modern reader is somewhat amused by the allusion to Pyrrho's courage, as evidenced by his absence of fear in the presence of "wag-

ons, precipices and dogs." In these days of congested automobile traffic, the courage required to meet a wagon does not impress us as monumental, especially in a quiet place like Elis. There is, however, another side to this description. The famous battle-wagons of Alexander the Great may have often involved Pyrrho in danger, when he was far away from Elis. As for the dogs, there are even now, in the Near East, dogs employed in guarding sheep, so fierce, that the bravest man meeting one of them without a weapon with which to defend himself, might easily lose his life.

Apparently Pyrrho's only occupation was teaching — a profession that he took very seriously. He was accustomed to take long walks in the fields seeking solitary places, and often started on a journey without giving notice of his intention. The motive of these long walks may be explained by the fact that he frequently took with him anyone whom he chanced to meet. The conversations during these walks probably illustrate the way he sought to extend his influence. This method of teaching reminds us of that of Socrates, who found his hearers in the market place. Pyrrho delivered lectures which seem to have been more or less informal, as one instance is given of his expressing annoyance at being interrupted.¹⁶ Some of his lectures must have been given regularly in a public place, for he is said not to have objected to people going in and out while he was lecturing. He always answered questions that were put to him carefully, in a way that his friends admired, and was distinguished for his power and authority in argument. His calmness of disposition was gained through the study of philosophy, for when he was a young man he was of a very excitable temperament. Two instances are given of Pyrrho's losing his self-control. Once he was very angry about something connected with his sister and, when some

one criticized his attitude of mind, he said, "It is not in dealing with a woman that you will find the proof of indifference."¹⁷

On another occasion, he was frightened by a dog and climbed a tree, and, when accused of inconsistency, he remarked that it is a difficult thing to lay aside humanity altogether. There were many times, however, when he succeeded in maintaining his indifference of manner. For instance, he is said to have endured a surgical operation without even contracting his brow, and, again, when in danger of shipwreck at sea he showed no fear. He was apparently consistent in striving with all his power to counteract the effects of circumstances with his actions, but, if that was impossible, to do so at all events with his reason. Epicetus quotes him as saying, "There is no difference between life and death," and he did not seem to value his life, but was often in danger of losing it.¹⁸

The slur upon women was unworthy of a philosopher of that period who had before him the illustrious example of Plato, who made the position of men and women equal in the Academy. It is not, however, the only instance on record where quarrels have been complicated by difference in sex.

There is a story told of him which shows the democratic side of his character. He was once invited to a grand dinner, given in his honor, a dinner so sumptuous as to have been a heavy expense to his host. Pyrrho complained about the money wasted and the unnecessary style, and said that he would never accept another invitation to the house of his friend who gave the dinner if he were to be received with so much display. "How much more we should enjoy ourselves," he said, "in some simple way, talking with each other, than with all these different kinds of food so wonderfully prepared. In the end it is the servants who eat the most of it."¹⁹

One of Pyrrho's enthusiastic friends was Nausiphanes, who admired the poise and unshaken self-control of Pyrrho more than he did his sceptical teachings, and said that he would like to have Pyrrho's attitude toward life and keep his own philosophy, which was practically that of Democritus. Nausiphanes was the author of a book called the *Triplos*, a work on principles of logic and theory of knowledge. Epicurus seems to have been much influenced by the teachings of this book, and the Empirical physicians also often consulted its system of inductive logic.²⁰

Among the traditions the truth of which there seems to be no reason for doubting, there are some especially important because they show the great esteem in which Pyrrho's moral character was held by his contemporaries. He was made high priest, which in itself was considered an exceptional honor. It is said, also, that all philosophers were relieved from taxation on his account. The phrase "all philosophers" may refer, possibly, to his own followers, and not to philosophers in general. However, the high opinion held regarding him, even outside of Elis, is further shown by the fact that the Athenians presented him with the freedom of their city.²¹

After the death of Pyrrho, a statue was erected to his memory near the market place in Elis. Pausanias, who visited Greece in the second century of our era, describes the Corcyrean portico, the architecture of which was Doric. It had a double row of pillars and at the end of the portico was a statue of Pyrrho. Pausanias said of him that he "had great persuasiveness on any topic." He also stated that Pyrrho's tomb was in Petra, a place which was by tradition an old hamlet not far from Elis.

The influences which produced the character and philosophical standpoint of Pyrrho were broad and varied.

They included artistic training, unusual social privileges, wide travel, and contact with the best teachings of Greek Philosophy.

Pyrrho evidently gave a great deal of thought to his plan of life before he formulated the fundamental teachings of Pyrrhonism. There is a story about him which throws a vivid light upon the workings of his mind. On one occasion he was heard talking to himself, and on being asked the reason, he replied that he was studying how justly and adequately to meet the conditions of life. Owing to the *akatalēpsia* or incomprehensibility of the nature of things, he had not found the root of either good or evil or the principle of ultimate truth. They seemed to depend upon custom and law. Nothing was in itself more this than that, therefore he reserved his opinion and suspended his judgment. He did not teach these things in an attempt to establish a sect of any kind, but from the very beginning spoke of his teachings as an *agôgê*, or method of life.²² This word was used by Aristotle also in the same sense.

CHAPTER V

PYRRHO'S PHILOSOPHY

Pyrrho taught that in order to be happy one should consider three things.

- I. What is the origin of things?
- II. What should be our attitude toward things?
- III. What would be the result of this attitude?

Pyrrho's avowal of happiness as an aim has often been misunderstood. The happiness he describes is not the state of apparent contentment of one who does not think, but, on the contrary, it depends upon the solution of the most difficult problem of science and philosophy. Pyrrho begins by asking an audacious question, "What is the origin of things?" which means in effect, "What is final truth?" It is significant that he approaches this problem from the standpoint of the theory of knowledge. Mystics of all ages have claimed that the problem of ultimate truth cannot be solved by the reason, but must be approached by a method involving a different theory of knowledge, one which rejects the authority of the reason and depends for its data on super-rational experience without a logical basis.

Pyrrho, by asking the question, "What is final truth?" challenges the reason itself to deal with the problem. Thus far the nature of things is unknown. In view of this and in seeking the solution, he asks the further question, "What

shall we do about it?" He recommends three lines of action.¹

- I. Doubt explanations of things which naturally come to the mind.
- II. Think, consider, investigate.
- III. Suspend judgment as to ultimate truth.

The Pyrrhonist never denied that ultimate truth could be found. Opinions are variable, not necessarily wrong; but they deal with appearances only. The true sceptic did not claim that the origin of things could never be discovered. Pyrrho kept the way open for the eternal search for ultimate truth. This coincides with the most advanced point of view of modern science, which, though sceptical, does not deny the power of the reason to attain final truth eventually, through successive approaches toward this end.²

The investigation demanded of the Pyrrhonist included research in all lines of thinking. Like the modern scientist, he depended upon the results of common sense for arranging the details of daily life, in all its various kinds of experience, and lived in conformity to causal laws. This was the platform of the Pyrrhonists, and in later times, under the influence of new and strange conditions, their investigations extended to many fields of knowledge — Mathematics, Physics, Medical Science, and Morals.

The definite philosophical attitude to which this form of doubt and this emphasis on investigation led, made itself evident at the very beginning. As a young man Pyrrho came into close relation with the teachings of Socrates through Phaedo, who had a school in Elis. The Socratic doubt, interest in ethical problems, and respect for law and order were all elements of his early preparation. The next

step in his development was taken in India in the unfamiliar environment of that far away country. Buddhism was a religion consisting almost entirely of moral teachings in which standards of progress in life were ethical. During much of the time Pyrrho spent in India he was with a close friend who was fired with the spirit of Democritus. The result was the beginning of a tendency in philosophical thinking of startling originality. The standpoint of Pyrrho contains a new element not found in earlier Greek philosophic teaching. This is shown by the quotations from his platform given above. He says that the nature of things is not known — our attitude toward the problem should be an open mind. This describes the modern scientific method of thinking which takes it for granted that no knowledge is necessarily ultimate, so that the scientist is therefore ready to consider all possibilities in the line of new discoveries. Pyrrho called this a "suspension of judgment." He taught that, while suspending judgment regarding all problems, every citizen should keep the existing laws of his land in a spirit of calmness. The public worship of the gods was in his time an important element of daily activities. The question of belief in the gods was a pressing one to a young man like Pyrrho, especially as his great aim in life was ethical. His conclusions were apparently the same in his religious as in his philosophical thought. He was sceptical about truth beyond experience — such as that which depended upon the authority of the prevailing religion — and he required freedom of thought. At the same time, his attitude was one of open-mindedness, and not of positive denial. Thus he claimed to attain to that well-being which was the aim of much of the philosophical thinking of his age. His mind was free and calm and he carried out his ethical ideals

in obedience to the laws of his city with such success that he received four of the greatest honors that could be bestowed upon any man of his period. The vitality of this habit of thought was such that, aside from the personal influence of his life in his own entourage, his school of philosophy persisted for half a millennium, and exerted an influence which, as has been noted, is still alive in modern scientific methods of thinking. The avowed attitude of his school was that of research and examination, with an open mind.³

Pyrrho was the first to teach, as the basis of a distinct movement, doubt, unadulterated by positive statements.

The chain of thought of the Pyrrhonist may perhaps be given as follows: The general relations in which things stand to one another cannot be measured, as no common measure has been found to use as a test. Nothing is by nature good or bad but things become so by custom and law.⁴ We do not know things as they really are, but only as they seem to us through experience which presents to us an outside world. This is a world of appearances. We have found no criterion which enables us to judge values. There seems no way of getting an objective knowledge of the nature of things. Neither sense perception nor the reason has thus far given us either truth or falsehood, but what we learn from sense perception and from reasoning seems wholly related to the world in which we live, and gives us no knowledge of reality. Sense perception and opinion deal only with the world of appearances. There seems to be no difference in value in the various results of sense perception, and when one finds that out, he suspends his judgment in regard to all theories of reality and all philosophical systems. This is not to deny all knowledge; it is to doubt but not to deny the possibility of ultimate knowledge.

The psychology of Pyrrhonism consisted in the act of suspending the judgment (*epochê*). When one finds that no argument exists about any subject whatever that could not be opposed by an argument equally strong, he must realize that nothing is known about the nature of that subject, and he will suspend his judgment. The natural result of suspension of the judgment is calmness and tranquillity of soul (*ataraxia*). One must consider and compare the results of the search for ultimate truth and when it is understood that they have thus far been negative, *epochê*, *adiaphoria*, and *ataraxia* — suspension of judgment, indifference, and tranquillity — will follow one after the other as shadows follow an object.

The term *epochê*, or suspension of judgment, is usually attributed to Arcesilaus, although Pyrrho is said to have been the first to use it in reference to attitudes of mind. The action of suspension of judgment was an integral part of Pyrrho's system, and when we remember that Arcesilaus was fifty years younger than Pyrrho, it is difficult to believe that the technical term was used first by Arcesilaus.⁵

The foundation of Pyrrho's attitude toward the testimony of the senses could probably be found in Democritus' book on "The Relation of Sense Perception to Thought." Metrodorus, the Democritan, is quoted as saying, at the beginning of his book *On Nature* that the testimony of the senses is not merely dim, but altogether dark. He is said to have denied that we know whether we know anything or whether we know nothing. He denied, also, that we even know what ignorance and knowledge are; and stated, furthermore, that we do not know whether anything exists or not.⁶ This same statement of Scepticism was partially reproduced by Diogenes and Aristocles in connection, not only with Metrodorus, but also with a group of Democritans, who were all from the same region geographically, and to which Anaxarchus belonged.

Nessus, of the island of Chios, studied under Democritus, and taught Metrodorus, of the same island, who said that he was not even sure that he knew nothing, and who taught Diogenes of Smyrna (not far from Chios), who taught Anaxarchus, and the words were added, "who knew Pyrrho." ⁷

We have the same testimony from Sextus Empiricus, given in different words. Metrodorus and Anaxarchus denied the existence of a criterion of knowledge, and Metrodorus said that he knew nothing, and did not even know that he knew nothing. ⁸

Galen, the distinguished physician and author of the second century A.D., quotes Anaxarchus as making well-being the aim in his philosophical system. ⁹ As Anaxarchus was the real teacher of Pyrrho, we probably find in the quotations given above the way the idea of doubt was presented to Pyrrho.

Sceptical Formulae or Maxims of Pyrrhonism

The two formulae that were supposed to completely express the sceptical attitude, and were most clearly connected with the whole history of Pyrrhonism were *epochê*, and *ataraxia*. Pyrrho evidently emphasized the use of *adiaphoria*, that is to say, "it means the same to me," and *apathia*, "without emotion," equally with that of *ataraxia*. Neither *epochê*, nor *ataraxia* were original with Pyrrho, but were used by many others. The technical term *epochê* is usually attributed to Arcesilaus, the younger contemporary of Pyrrho, but this is probably a mistake originating in Academic records. The origin of the use of the word *ataraxia* as an aim, we find at least as far back as Democritus, whose ethical teachings were based on the emotions. The same idea appears also in Epicurus, who taught tranquillity of soul. Epicurus probably inherited the term from Democritus through Nausiphanes

and brought it into general use. Thus Pyrrho found the right word ready for him when he wished to express this fundamental item in his system. Timon, in his *Images*, attributes the idea of *ataraxia* to Pyrrho.

We have in the formula "no more" another of the frequent links between the Sceptics and Democritus; Sextus Empiricus claims, however, that the Sceptics used the term differently from Democritus. Of the large number of sceptical formulae, the three that seem to have the oldest connection with Scepticism are "to every statement" (to every statement an equal statement can be opposed), "no more" (no more this than that), and "I determine nothing." *Aphasia*, or silence, appears early in these discussions.

In the Pyrrhonic teachings, the three formulae, "no more," "I determine nothing," and "I suspend my judgment," refer to the method of scepticism. The general explanation of their meaning is that there is nothing in sense perception to convince us that one theory of what lies behind the senses is more true than another. The words *adiaphoria*, indifference, *aphasia*, silence, *ataraxia*, tranquillity, refer to the state of mind that results from the sceptical method.

Of these terms, *aphasia* and *adiaphoria* belong decidedly to the earliest Pyrrhonic teaching. Indifference was one of the maxims of Pyrrhonism, and it was of two kinds. It could be applied to the lack of difference between perceptions by the senses, or it could be just an attitude of mind. Without doubt, Pyrrho himself used the larger part of the sceptical formulae, judging from the accounts of both Sextus and Diogenes, but the accusation that even by using such formulae the Pyrrhonists expressed certainty about something, evidently belongs to later times. We infer that this is the

case, because the answer to the accusation bears the medical stamp that so frequently characterized the arguments of the later Pyrrhonists, namely, that the formulae include themselves in their meaning, as a cathartic removes itself together with other harmful objects.¹⁰

The Sceptics emphasize the point with insistence that their formulae are dogmatic in appearance only. Pyrrho's use of these maxims was, doubtless, comparatively elementary. In his day, at the very beginning of Pyrrhonic teaching, the use of formulae, or maxims, had not been reduced to a science, as in the time of later Pyrrhonism. "We use these formulae not as literally making known the things for which they are used, but loosely, and if one wishes, inaccurately."

The Ethics of Pyrrho

Intellectually Pyrrho was a Sceptic. Did his Scepticism extend to his ethics? From the testimony of both Timon and Cicero he was apparently a severe moralist. What kind of man must he have been to receive the honors which tradition accords him, both in art and religion? We know that he had an attractive and sympathetic nature; we are told that he charmed his friends from youth up; no teacher ever had more devoted followers. Yet these characteristics do not account for the high esteem in which he was held, both in Elis and elsewhere. It is evident that he must have been considered not only a dignified and imposing personality, but an ethical and, possibly, even a religious leader. This can only be accounted for by the psychological effect of his life and character. In summing up our knowledge of him, we are struck by the unusual combination of his intellectual standpoint and his ethical habits. As a result

of his Scepticism he reached the conclusion that there was as yet no absolute truth, and no measure for ethical concepts, for nothing was any more this than that. Honor and shame and justice were, therefore, relative, with no other way of measuring them than by the customs and laws of the people. Naturally, his attitude toward law and custom would impress the multitude. Timon, in his description of Pyrrho, represents him as modest, and never excited by the discussions and opinions of the lighter class of people. He was not disturbed, either, by the sudden changes in legislation which characterized the age in which he lived, and he even seemed indifferent to politics. Yet he always respected the authority of custom and law.¹¹ Cicero claimed that Pyrrho's ethical teachings were positive, and that he taught that virtue was the *summum bonum*.¹² Moreover, that he considered virtue to be the only good, and that things usually sought after, such as health, strength, riches and worldly honors were wholly matters of indifference. But even according to Cicero's understanding of him as a moral leader, he did not teach a principle of virtue. By virtue, the common people would understand merely living up to the teachings of law and custom, and that was exactly what Pyrrho meant.

The age of Pyrrho was one of political insecurity. After the death of the outstanding leaders in Greece, daily life became difficult, as people lived in the midst of great disorder. It is significant of the political situation that purely theoretical topics, such as physical or epistemological problems were put to one side, and almost all the attention of thinking people was concentrated on practical questions. The problems of human happiness and personal deliverance from the increasing difficulties of life were uppermost. Thus

developed the individualistic tendency, so strong in the post-Socratic schools.

Pyrrho's initial psychological motive may be found in his personal characteristics. His philosophy was to a certain degree temperamental, like the pessimism of the nineteenth century, which likewise originated partly in the individual peculiarities of the founders. Pyrrho's attitude of indifference was characteristic of a placid nature, which he had developed voluntarily and which could not be perfectly imitated by others. This was recognized by one of his disciples who said that it was necessary to have the disposition of Pyrrho in order to hold his doctrines.

The philosophical explanation of Pyrrho's attitude of mind is that it was founded on a complete intellectual Scepticism. His ethical principles, like those of Democritus, were based on the results of certain courses of action. He sought "well being" in the inner life in the form of *ataraxia*. Thus he could find freedom on a new basis.

After the time of Socrates and Plato, serious subjects concerning the soul, the existence of the gods, and ethical problems were emphasized in philosophical discussions. Zeno, the Stoic, a younger contemporary of Pyrrho, placed the whole stress of his teachings upon moral issues. In such an atmosphere, Pyrrho could not disregard that aspect of philosophy. He approached the subject from his usual standpoint; namely, that knowledge of ultimate ethical standards had not been found. As Democritus said before him, "We, in truth, know nothing sure by the senses,"¹³ and again, "We cannot know reality in any way."¹⁴ Protagoras had also stated that "Man is the measure of all things." So Pyrrho, as well, places his ethical standards on a relative basis, which differs from age to age, as the moral code adapts itself to

changing circumstances. His attitude may be described as follows: As neither the senses nor the reason can be depended on to give us a criterion of truth, there is no known criterion, and ethical distinctions are relative, not absolute, but not therefore to be disregarded. Social and ethical distinctions arise from the needs of humanity, and should be respected like law and custom, which rest upon the same basis. Virtue, therefore, must be something independent of the world of appearances and not affected by its changes. Pyrrho's ideal of virtue was freedom of all kinds; possibly even freedom from physical suffering, which is one of the conditions usually belonging to human experience; freedom from the enslavement of intellectual uncertainty regarding the truth; and finally, freedom of the soul of a positive kind, bringing peace and tranquillity of spirit. Scepticism was, in the philosophy of Pyrrho, a psychological basis for the calm and happy attitude of mind which he called *ataraxia*. Such a state of freedom he described as happiness like that of the gods, and serenity that nothing could move.¹⁵ We find here a somewhat natural reaction from the unsatisfactory dialectics of his age, and a conviction that the artificial rules of formal logic were thus far self-destroying. His ultimate ideal, namely, emotional freedom, is a high one. Such an ideal has been based by the greatest ethical teachers upon love and truth, both of them practical concepts which Pyrrho did not accept. He, on the contrary, claimed that although he could not find the final content of virtue, he would strive for those conditions which met the demands of life, and live accordingly. Although he denied the reality of good and evil in themselves, he did not deny that the circumstances of life compelled him to accept a difference in the practical value of the contents of experience.

It apparently made no difference to the common people that in his philosophical teachings Pyrrho was openly a leader in sceptical theories. The majority of the multitude knew little about philosophy; it was a subject that did not touch them practically but belonged to the discussions that they heard on every hand, like the disputing in the temple of the Muses to which they paid little attention.

Ethics of Pyrrho and the Socratic Ethics

There are certain characteristics in which the ethics of Pyrrho are like those of Socrates. Both made the freedom of soul that results in happiness their aim. Both illustrated their teachings by living good lives. To both, virtue was that which leads to happiness. To both, law and custom represented the ordinary rules of conduct. Beyond this, the difference is very great.

Socrates believed in eternal principles of goodness and beauty. He believed also that virtue is knowledge and can be learned, and he tried to increase his fund of virtue by constant discussion. While Pyrrho disliked argument and abhorred discussion, it was the daily joy of Socrates. Socrates found happiness in finding virtue and living it; Pyrrho found happiness in indifference to definitions of virtue and to intellectual methods of finding it, but he lived it all the same on the basis of his own philosophy. The aim of both might be called utilitarian. Socrates strove to use his intelligence to increase his ethical power; Pyrrho withdrew from comparing and judging to attain emotional serenity. To both there was lasting happiness in trying to live in a way to attain desirable ends, but they conceived it from widely different points of view.

Socrates and Pyrrho differed most in their political and religious ethics. Politically, Socrates desired to reform standards of law, and increase respect for justice; Pyrrho's method was to emphasize the highest standards already taught regarding justice and law. Socrates taught that self-control and other virtues should be cultivated for the good of the individual and the State, especially the latter. Pyrrho seemingly expressed no such social purpose, but since the State honored him both in Elis and Athens, he could not have been considered indifferent to its welfare.

In religion, Socrates may be called the first among the Greeks to teach clearly the principle of teleology in the universe. As far as we can now understand, in his deepest conviction he did not share the idea of the gods current in his time. He spiritualized the ideal of good in a new and peculiar way that corresponded with his general line of thinking. This we must infer from the accusations against him. We have here something that, so far as we know, has no parallel in Pyrrho.

The result of these different attitudes of thinking and living was significant. Pyrrho respected the existing religion and regarded the prevailing moral laws. He was accordingly praised and honored in life and death. Socrates was condemned to give up his life, but left to humanity a higher basis for morals and religion than had before existed. We have, however, data so much more complete in regard to Socrates than to Pyrrho, that the comparison which seems evident may not be altogether just to the latter. He is one of whom it may be true that the real personality was somewhat different from that which lives in historical remembrance.

Pyrrho's Service to Philosophy

As a figure in Greek philosophy Pyrrho may not stand out as distinctly as we might desire, yet, no doubt, the principles that he avowed were the essential basis of the subsequent teachings of the Pyrrhonic School.

It is in the method of thought of Pyrrho and in the combination of the different elements of his philosophy that his originality is found. In fact, more originality can be attributed to him than to any other Greek Sceptic, except possibly Aenesidemus.

Pyrrho's service to philosophy was that he revealed sources of ignorance and taught the importance of an open mind in scientific and philosophical research.

CHAPTER VI

THE PROBLEM OF INDIAN INFLUENCE

We have in Pyrrho's teachings the earliest well attested instance of Indian influence on Greek Philosophy. This influence was a consequence of Pyrrho's residence in India in the retinue of Alexander the Great, as a member of the royal court, where we are told that he associated with Gymnosophists and Magi.

Plutarch, in his *Life of Alexander*, gives us an account of a discussion between Alexander and the Gymnosophists. The sayings of the latter are characterized as short and full of meaning. One of them, on being asked how long it was honorable to live, replied, "As long as it seems to a man better to live than die." One of the distinguished men among the Indians, whom the Greeks call Calanus, although his real name was Sphines, thought that the time had come when it would be better for him to die than live. He accordingly mounted his own funeral pyre, and was voluntarily burned to death. This event was doubtless known to Pyrrho, and he may even have been present when it happened. Such a spectacle and the principles which developed the attitude of mind that made voluntary death possible may have increased Pyrrho's indifference to life in general.¹

No one has ever caught the imagination of the world to such an extent as did Alexander. He was a man who loved culture, appreciated beauty and sought his friends among philosophers and poets. He offered prizes to players on the harp, rhapsodists and dramatists, and always carried with him some volumes of the world's best literature. This was

true in spite of the fact that he lived in a military and even cruel age, possessed a conquering attitude of mind, and had, himself, attained great military prowess. His very unusual characteristics were doubtless largely due to his lessons with Aristotle in the Temple of the Muses in his native city.

We do not know where Pyrrho first met Alexander or when he joined his army. Judging from the difficulties of travel in that age, it is reasonable to infer that he was with Alexander when he first struck east from Tyre in 331 B.C. We may, however, overestimate the hardships of an Asiatic journey in that time, for Persian rule had brought a high degree of wealth and luxury into Western Asia. We have one instance of comparatively quick travel back and forth, for we are told that Alexander wished to add to his library during the expedition and sent to Greece for more books.

It is possible that Pyrrho was invited also to join Alexander when, in 336 B.C., the latter visited Corinth to attend a Council, and went to Delphi to consult the Oracle about his plans. Anaxarchus, Pyrrho's special friend in the court, is referred to many times in the story of the royal journey as if he were a constant companion of Alexander. It was apparently through the influence of Anaxarchus that Pyrrho was invited, and not because he was a young artist. The latter supposition, however, is not impossible, as Apelles, the greatest painter of the period, in whose school at Sicyon Pyrrho probably studied, was a member of Alexander's court.

The first undertaking of Alexander after he crossed the Hellespont in 334 B.C., was to visit Troy and offer sacrifices to the Ilian Athena and to the Homeric heroes. There he found what he supposed to be the shield of Achilles.

Alexander spent the winter of 332-331 B.C. in Egypt.

Naucratis, in the delta of the Nile, had up to that time been the most important Greek city in Egypt, but he created a new metropolis, one which bore his name, and was destined to a more brilliant future than even the imagination of Alexander himself could picture. During the following centuries the city became not only a renowned commercial center, but to a far greater degree a seat of knowledge. It even became a center of Pyrrhonism — something that Pyrrho, who had not then created the outlines of his philosophical theories, did not foresee, although he may have been present at the founding of the city.

Because of the happy coincidence of an eclipse, we know the exact day when Alexander's army crossed the Tigris to strike directly into the interior of Persia. It was September 20, 231 B.C. The story of the years Alexander spent in the East is well known. Throughout this whole period his interest in philosophy was evident. Even in Egypt he had sought out a philosopher named Psammon, and attended his lectures. Passing through Phaselis and chancing to see a statue to a local philosopher, he immediately halted the army and formed a procession to the statue which he crowned with flowers. Later on in India he was accused of stealing Indian learning by having some works translated into Greek. The travels of the conqueror were extensive in Western Asia. Among the places visited were Samarkand and Bokhara. The army journeyed down the Indus, as far as the Indian Ocean, and did not return to the West until 323 B.C. when Alexander died. After that sad event, Apelles painted a portrait of him which is familiar to the world, in which he is represented as wielding a thunderbolt. Lysippus the sculptor made a statue of him; Pyrgoteles engraved his head on gems, as it is seen on many an-

cient coins; and Pyrrho returned to Elis to found a school of philosophy. As a result of the expedition Greek kingdoms were established in all parts of Western Asia, introducing the Greek language and civilization; the scope of science, philosophy and religion was broadened by Alexander's campaign.

Pyrrho apparently had several years of companionship with some of the most learned men of his time. The education which he received in this way was extensive, affording unusual opportunities of studying philosophy and art, foreign languages and foreign ideas, and of gaining a spirit of internationalism and tolerance. In the court of Alexander throughout the whole expedition there were not only men of culture in all lines, but statesmen as well, among whom was Ptolemy I, afterwards so influential in the early development of Alexandria. In comparing Pyrrhonism with other post-Socratic schools, the fact must be considered that Pyrrho had a wider opportunity for gaining general culture than did the founders of the other sects.

Pyrrho had one characteristic which is worthy of mention in this connection, although it may perhaps be explained differently according to the angle from which it is studied. He kept aloof from all the different forms of excess practiced in the army of Alexander. We may infer this not only from his reputation for scrupulous conduct but also from the fact that no stories of moral weakness in that line are told about him. Early historians among the Greeks followed the natural method of relating what interested them in human conduct, and portrayed many weaknesses of great men. Even Anaxarchus, the friend of Pyrrho, was described as having, on one occasion, a childish fit of jealousy and anger toward his great leader, which lasted several

days. Nothing of the kind was related of Pyrrho. His life during the Indian campaign, as far as we know, illustrated his philosophical purpose. He wished to meet the conditions of life justly and adequately.

Pyrrho's visit to India took place early in the history of Buddhism. Modern knowledge of the tenets of Buddhism of that particular era is very uncertain. There is even doubt regarding the exact date of Gotama Buddha. If we suppose, however, that Pyrrho was in India from 150 to 200 years after the time of Buddha, it is evident that the leading teachings that formed the foundation of the Buddhist religion were established. Although we do not know where Pyrrho joined Alexander's army, or how long he remained in India, as travelling in those days was very difficult, he was probably with the army when it crossed Persia and during its stay in India. The one statement that we have, namely, that he talked with the Magi and Gymnosophists, implies that he studied both the religion of Persia and that of India. We must not forget the difficulty of language which he encountered, but Alexander's stay in India was sufficiently long for Pyrrho to gain certain definite ideas.

There was much in the dialectic of early Buddhism to lead to sceptical discussion. The "Fourfold Exposition" of possible views is prominent in the history of Buddhistic thought: ²

There is;

There is not;

There both is and is not;

There neither is nor is not.

The agnosticism of Buddhistic teaching is very strong, and includes acceptance of the impermanence of all reality,

excepting that of action, and extends even to the exclusion of the reality of self.³ This agnosticism, however, was entirely too positive to have been the foundation of Pyrrhonism, which was far more nearly allied to the philosophy of Democritus than to that of Buddha. The agnosticism of Buddhism was not in reality agnosticism at all, although it is so called in treatises on Buddhistic teachings. It was more a philosophy of denials of certain theories leading to constructive thought in other lines than it was a confession of ignorance.

There was a whole field of Buddhistic teaching, however, that apparently had a strong influence in shaping the course of Pyrrho. This teaching was not entirely ethical, technically speaking, but we might call it the inculcating of certain attitudes of mind, which, even in detail, were well illustrated in the subsequent course of Pyrrho.

The aim of life as taught by Buddha was happiness, considering happiness to be emancipation or freedom from desire. Desire was bondage. The aim of life, therefore, was to seek freedom from bondage, and thereby secure happiness. We may accordingly sum up the different ways in which Pyrrho's attitude of mind agreed with the teachings of Buddhism as follows: Pyrrho's aim was happiness. This he sought through freedom or emancipation in his life of thought. He was indifferent regarding outward riches. In fact, the indifference of Pyrrho was of two kinds. The first was indifference to discussion based upon the lack of proof that one thing differs from another in essence. (Buddhism also taught that it is impossible to know things in their own nature.) The second was indifference to worldly goods, which bore a strong resemblance to the Buddhistic teaching regarding the vanity of the things that belong to

human life. Pyrrho loved meditation, which was enjoyed also by Buddha. Speculation on metaphysical questions was considered in Buddhism as definitely hostile to liberation from the ills of life in one's thinking, as it does not tend to tranquilize the heart. According to Buddhism, the sage declines altogether to discuss metaphysical problems, as such discussion does not promote freedom. One of the earliest formulae used by Pyrrho was *aphasia* or silence. Buddhism also teaches that we cannot make any affirmation. All is appearance. Truth is silent. Neither affirmation nor negation aims to attain calm.⁴

Buddha emphasized the importance of right living in creating freedom, or emancipation. For Nirvana, as the unconditioned, belongs only to right living. He enjoined kindness, right speech, right thought and action, purity and self-mastery as necessary to this end. All of these were shown in the life of Pyrrho, at least in a sufficient degree to secure for him the praise and trust of the common people.

Pyrrho's stay in India, consequently, may have developed in him a somewhat ascetic tendency of conduct and an attitude of mind similar to that which is called "quietism" in the terminology of Buddhism. He used to wander in deserted places in search of knowledge. Buddha himself is well known to have been an ascetic during a certain period.

In a final estimate, however, of the influence of Buddhism on Pyrrhonism, we must characterize it as comparatively slight. Traces of oriental influence may be conspicuous in Pyrrhonism, but they are traces, not essentials. Pyrrho's previous study and natural disposition had prepared him to assimilate something of what he learned of oriental philoso-

phy, but the influence of Buddhism upon him was largely in method rather than in the essentials of belief. Buddha in reality sought to find the truth, and through what he thought to be the truth he found emancipation; while Pyrrho found freedom in still seeking the truth.

CHAPTER VII

TIMON, THE PROPHET OF PYRRHONISM

(325/15 to 230/25 B.C.)

Timon gives the most important testimony in regard to Pyrrho. He was born in Phlius, and in very early life was a dancer in the chorus of the theatres.¹ Diogenes Laertius is the only authority for the statement that he had but one eye. He seems to have been an ambitious young man, for he soon gave up the profession of dancing, and went to Megara to study philosophy under Stilpo, who, like Pyrrho, taught apathy as an aim in life.² After spending some time in Megara he returned to his home, and married. One day, while walking along near the temple of Amphiarius, by chance he met Pyrrho on his way to visit the Pythian Priestesses. They fell into conversation and Timon was deeply impressed by his ideas. He had, of course, been somewhat prepared for Pyrrho's philosophical attitude by the teachings of Stilpo. The result of their meeting was that Timon, with his wife, moved to Elis and remained there until after the birth of his two sons. Thus the choral dancer became a philosopher, and the history of Pyrrhonism was widely modified by the teachings and character of this new disciple.

Timon was not able to support his family in Elis, however, so he left them and wandered in many lands visiting the Hellespont and the Propontis (at present called the Dardanelles) and the Marmora, earning money as a philosopher in Chalcedon, where he sold his wisdom like a Sophist.

Chalcedon is now called Kadikeuy and is one of the most beautiful Asiatic suburbs of Constantinople, from which wonderful views of the Marmora and Bosphorus may be seen. Chalcedon has a close connection with the history of Byzantium, later the city of Constantinople, and has always been, together with Scutari, a little to the north, a starting point for the traveller to the Far East. The Constantinople-Bagdad railway now begins in Chalcedon. The railway station is erected on the shore, near the sites of memorable events of the past, and one is thrilled to see the words "Constantinople-Bagdad" printed in large letters on the cars.

Timon's lectures were very successful, and he made a considerable fortune.³ After completing his work in Chalcedon, he went to Macedonia to visit King Antigonus, and also to Egypt when Ptolemy Philadelphus was king.⁴ He was very fond of learning, and among his friends were men of great intelligence. The tragedian Homer of Byzantium, whose mother was the poetess Myro, was one of these. Another was Aratus, who spent the latter part of his life at the court of Antigonus in Macedonia; and a third was Alexander of Aetolia, who was one of a distinguished band of tragic poets in Alexandria. Timon was a great help to his literary friends, as he furnished them with both plots and material for their writings. They were all diligent students of Homer, and Aratus is said to have asked Timon how he could procure the best manuscript of Homer, and he replied, "Get one that has not been corrected." Shortly after the year 276 B.C. he returned to Greece, and during the remainder of his life lived in Athens, with the exception of a short visit to Thebes. Here he became intimate with the rhetorician Zephyrus from Clazomenae, on the Gulf of Smyrna, whom he consulted about his works.

Timon's stay in Athens was characterized by constant attacks on Arcesilaus, whom he outlived. He was very quick to see the ridiculous side of every question, but his wit had a decidedly satirical vein which colored all his writings. While his brilliancy and learning made him well fitted to carry on a new movement, he lacked the earnestness of character which might have given it stability. It does not seem too much to say that had he been characterized by the high ethical ideals which we find in Pyrrho, he might have kept the sceptical movement in Pyrrhonic circles, whereas it did go to the Academy under Arcesilaus.

Diogenes accuses him of "being fond of drinking," but this is probably a mistake. "Fond of poetry" would require only a slight change in the Greek text, and would be a more consistent reading, as the rest of the paragraph states that Timon wrote on many subjects beside philosophy, such as lyric and epic poems, tragedies, and satiric dramas, comedies, and amatory poems.⁵

Timon was a prolific writer, and his works extended to twenty thousand verses, the principal subject of which was Scepticism. The *Python* was possibly his first work. In the books *About the Senses*⁶ and *Against Physics* he continues his account of Pyrrho's teachings. In his *Images*, he exalts freedom as a state of mind superior to the fanciful theories of dogmatic philosophers, and as independent of phenomena. In this book he speaks of the "myth of truth," and of the dependence of life upon the equality of one thing with another. Timon's most important work was the *Silli*, as the author of which he was often called "the Sillograph." This book was a satire upon all earlier and contemporary philosophers. It was written as a parody, in imitation of the *Nekyia*, the common name for the eleventh book

of Homer's *Odyssey*. Timon himself takes the role of Odysseus, and Xenophanes, that of Tiresias, a character so prominent in the mythical history of Greece.

The scene was partly laid in Hades, where Timon was listening to the contest between the shades of the philosophers. The only ones who were not ridiculed were Xenophanes and Pyrrho, and the latter was represented as quieting the disputes of the others.

Of the *Silli* there were three volumes. In this work Xenophanes is the principal character. He also wrote the *Iambics* referred to by Diogenes, and *The Funeral Banquet of Arcesilaus*. Probably the latter was a satirical poem in epic verse, but it contained some praise of Arcesilaus, his life-long opponent.⁷

Timon's son Xanthus was a doctor, and some histories have thought that Timon himself was also a physician, but that seems impossible from the character of his general interests, as described in his writings. He is, however, mentioned as educating his son to follow the medical profession, possibly thus early inaugurating a connection between medicine and Scepticism.

Other Disciples of Pyrrho

Pyrrho had eminent disciples, but we are not fortunate enough to know many of their names. The most distinguished of them was, as we have seen, Timon, "the Sillograph," his direct successor. Eurolochos, who is spoken of as prominent in Pyrrho's circle, is known to us only as being a great enemy of the Sophists, and as disapproving of dogmatic statements. He was sufficiently in earnest to give public lectures, and had some following. Another of Pyrrho's

disciples was Hecataeus of Abdera or Teos, a better knowledge of whom might elucidate some of the mysteries regarding Pyrrho.⁸ He was a friend of Ptolemy I and accompanied him on his expedition to Syria. Josephus speaks of him as a philosopher worthy of respect.

Hecataeus wrote a book on the law, the people, the government, and the religion of the Egyptians, which was a mixture of truth and romance and the basis of a part of the *History of the World* written by Diodorus of Sicily, during the first century B.C. He is said by some to have been a physician.⁹

Among the contemporaries of Pyrrho was Nausiphanes, before referred to, a Democritan and apparently a man of influence. He was much younger than Pyrrho but was charmed by his teachings. Nausiphanes is best known as the teacher of Epicurus, although there are chronological difficulties in that connection. He was, at least, his intimate friend. The reciprocal influence of the schools at that time is also shown by the statement that Epicurus frequently questioned Nausiphanes about the theories of Pyrrho. Nausiphanes was very influential in spreading the teachings of Democritus. Another among the followers of Pyrrho was a certain Philo, who was fond of arguing and sensitive about the outcome of his disputes.

One of the interesting problems in this connection relates to Theodorus, the Atheist, a leader in the Cyrenaic School. Suidas says that he was one of Pyrrho's pupils. This does not mean, necessarily, that he was a Pyrrhonist, but probably that he studied Pyrrhonism in order to become more thoroughly grounded in his hedonism. Most interesting comparisons are made by both Sextus Empiricus and Cicero between Pyrrhonism and the Cyrenaic School. Numenius,

who is spoken of by Diogenes as being a follower of Pyrrho, may have belonged to the later Pyrrhonists.¹⁰

Relation of Early Pyrrhonism to Medicine in the Time of Timon

The definite relation that existed between Pyrrhonism and medicine is foreshadowed even in the time of Pyrrho and Timon. We see the empirical tendency of Pyrrho partly in his hatred of dialectic, and partly in his special interest in sense perception. This is illustrated by the fact that Timon wrote a *Treatise on the Senses*. We would not for a moment claim that this side of Pyrrho's philosophy had its origin in a love of science for its own sake, but he studied sense perception in order to find a proof that the senses give us no real knowledge. We find an allusion in Timon's treatise to the method used in this kind of study which shows it to have been very elementary, but it was in accord, nevertheless, with the thought of the time. Timon says, "The reason why a thing is sweet, I do not declare, but I confess that the fact of sweetness is evident."¹¹ This line of treatment of sense perception, so characteristic of Pyrrho's age, became increasingly prominent with the later Pyrrhonists. As Pyrrho was especially familiar with the teachings of Democritus he must have known many of the results of his study in natural science. In fact, the illustration which we have given above from Timon's *Treatise on the Senses* is found in almost the same form in the writings of Democritus.

During the years that Timon spent in Chalcedon, he without doubt often heard of Herophilus, the distinguished physician of that city. Herophilus may have left Chalcedon before Timon went there to live, as he founded the school

of medicine that bears his name in Alexandria, not in Chalcedon; yet, as Chalcedon was a comparatively small place, many there probably remembered him. Erasistratus, another great physician of the period, was at the height of his influence in Alexandria during the life of Timon. He studied under Metrodorus, the pupil of Democritus, and the teacher of Anaxarchus. Thus we see that the strong Scepticism of Metrodorus had been not only one of the influences to shape the thought of Pyrrho, but that it also found its way to Alexandria, through the distinguished physician Erasistratus.

In Timon's time, under Ptolemy I and II, Alexandria became the greatest city in the world, as its founder had definitely intended. Its leadership in commerce during that era is well known, but progress there was not confined to commercial life. The literary influence of Alexandria was strong in all the cities of the Eastern Mediterranean, and the fame of its museum and library was widespread. During the same period, Herophilus and Erasistratus and their followers founded the two rival medical schools in Alexandria, which were celebrated through the then civilized world.

One of the early points of contact between Scepticism and medical development was through Timon's son, Xanthus, who was a doctor, as previously mentioned. He was also a leader in the sceptical school, probably in Alexandria, although it may have been in some other city of the Greek world.¹²

Pyrrhonism as an Organization

Pyrrho and Timon may have been at the head of an organized school, referred to in later times as the "Early Pyr-

rhonic School." This is not the general supposition, but there is nothing to make it impossible. The method of organization lay ready at hand, furnished by the Greek religion, and followed by the Academy, Lyceum, and other schools. Whether Pyrrho took advantage of this possibility or not would probably depend on the number and importance of his followers, and would have involved the expense of the necessary sacrifices to the Muses. An organized sect implied a religious form of dedication to the gods, usually to the Muses, and either the erection of a temple to the Muses, or the use of some such temple already in existence. A temple to the Muses was everywhere accepted as a place where people could study, that is, a school.¹³

We have more details about Greek customs in regard to organized learning in the history of the Academy and Lyceum than in that of earlier schools of philosophy. Pyrrho's Scepticism would not have been an objection in the minds of the people to a formal dedication of Pyrrhonism, for they were too much accustomed to general philosophical discussion for that, and to the priests and the majority of the people such discussions sounded more or less alike. A formal dedication of Pyrrhonism would have made it a distinct sect, as it was often called by posterity. As it is well attested that Pyrrho did not destroy the authority of custom, and as he was himself an high priest, he could easily have arranged the ceremony of dedication. This would not have seemed to him an inconsistency.

The fact that Pyrrho held lectures was an argument in favor of some kind of an organization of early Pyrrhonism. A stone has been found near Phocaea, an ancient town just north of the Gulf of Smyrna, which adds some proof to such a supposition. The stone bears an inscription which states that a certain Menecles speaks of

himself as the head of a Thiasos of Pyrrho, whom he calls an inspired leader, one who makes all arguments wholly equal and pursues the path of *ataraxia* among mortals.¹⁴

If Pyrrhonism was an organized school in Pyrrho's or Timon's time, it would simply mean that it was an organization of a teacher and followers, not a collection of dogmatic opinions. Sextus Empiricus takes up the question, in the first book of the *Hypotyposes*, and claims that Pyrrhonism is a sect, in the sense that the Pyrrhonist follows a certain kind of reasoning based upon phenomena which shows how to live according to the habits, laws, and teachings of the fatherland, and one's own feelings.¹⁵

Pyrrho was certainly the historical founder of the school that bears his name, although for a long period it was in abeyance as an acknowledged sect. After Timon's death, Pyrrhonism apparently came to an end as a separate movement. It certainly had, however, a quiet influence in Alexandria and other cities of the East. Timon's son, Xanthus, his successor, is said to have been a man of eminence, but he is the last leader mentioned before the revival of Pyrrhonism.¹⁶

The number of Timon's followers was not small, as he was an extensive traveller and a man of strong personal influence. They were, nevertheless, too widely scattered to unite in a common organization. Diogenes gives the names of pupils of his from Cyprus, Rhodes, Seleucia, in Western Asia Minor, and Troy. As a pupil of one of these, he mentions Eubulus, of Alexandria, illustrating the early connection of Pyrrhonism with that city. The three most important names after the time of Xanthus showed the tendency of whatever Pyrrhonic movement still existed to concentrate

in and about Alexandria. Eubulus was one of these, Ptolemy of Cyrene, another, and, last of all, Aenesidemus, who brought the school again into existence in the city of Alexandria.

The evident reason for the disappearance of Pyrrhonism is that it was submerged by the rise of the stronger sceptical influence of Arcesilaus in the Academy itself.

CHAPTER VIII

SURVEY OF SOURCES OF INFORMATION

Many attempts have been made to elucidate the philosophy of Pyrrho, with reference to the writings of Aenesidemus, of the first century B.C., and who may be called the founder of later Pyrrhonism. Quotations from him abound in the history of Pyrrhonism, especially in the books of Sextus Empiricus, and also in those of other writers of the later Pyrrhonic School, after the time of Augustus. The results have necessarily been misleading, from the failure to properly sift the evidence, since much was attributed to Pyrrho that was of later origin. His character and teachings cannot be correctly understood from the standpoint of the subsequent teachings of the Pyrrhonic School, for Pyrrho was a child of his age, and can only be comprehended in connection with his environment. We have, therefore, attempted to trace the influences that produced him, and have sought to discover those traits of his system which were characteristic of his time.

Pyrrho himself left no writings. There are several authorities who furnish contemporary testimony in regard to him, which we find in the form of quotations given by different writers on Pyrrhonism. The most reliable of these is Timon of Phlius, the Sillograph, Pyrrho's immediate follower, whom Sextus Empiricus calls the "Prophet of Pyrrhonic teachings."¹

Timon, as already noted, was a sceptical satirist of philosophers. He was a ready speaker and a prolific writer. None of his books are extant, but his verses were quoted freely and some of them still survive, having been quoted and requoted by different authors.²

A careful examination of the account of Pyrrho given by Diogenes Laertius, in his *Lives of the Philosophers*, written in the third century A.D., shows that it was taken from many sources, the oldest of which are the writings of Timon, and Antigonus of Carystus. Antigonus of Carystus lived in Athens at the time of Arcesilaus and Timon. He was a sculptor as well as a prolific author, and was called later to the court of Pergamus, where he wrote most of his books, all of which are lost. He wrote biographical sketches of contemporary philosophers, among which were included the life of Pyrrho, and of Timon. He was a young man when Pyrrho died. His *Lives* were probably written about 240 B.C., shortly before Timon's death, or a little later.

Carystus, the home of Antigonus, was a free city, situated at the southern point of Euboea, and celebrated in ancient times for its beautiful marble. A boy born there, in that period, could claim entrance to the circle of culture in Athens, but not in the same intimate way in which an Athenian might, as he would come from his native city without particular training, not even having traditional philosophical ideas. Antigonus evidently gained his standpoint in philosophy from Menedemus, as the life of Menedemus which he wrote is full of personal allusions. Menedemus was a life-long contemporary of Pyrrho, and the founder of what was called the New Megarian School. He was rather a superficial teacher, and his philosophy consisted mostly in what he had learned from Stilpo of the Megarian School, although in some ways Menedemus stood nearer to Socrates than those who called themselves his followers. The philosophical interests of Antigonus of Carystus which led him to write his *Lives* is due to Menedemus and shows a strong personal element in the quotations given. Antigonus has given us a remarkable series of

character pictures. He presents to us the philosophers of his time, penetrated by the spirit of the age, with its ever increasing interest in the individual and personal life. He pictures what he himself had seen, and, as he was by profession a sculptor as well as a writer, we have clear and vivid word portraits of his subjects. Shortly after Pyrrho's death, Antigonus visited Elis to collect more information regarding him from his own townspeople. In writing Pyrrho's life, he was helped in his work by Philo of Athens, a student of Pyrrho, who was older than Antigonus and who had enjoyed the opportunity of knowing his master intimately.³

In Diogenes' account of Pyrrho and Timon, there is a marked contrast between his quotations from Antigonus, and those which have their origin in the later writings of Aenesidemus. The latter show decidedly the influence of later Pyrrhonism.

We have a good illustration of this in the latter part of the picture of Pyrrho given by Diogenes, which from its similarity with the account of the doctrines of Pyrrhonism as found in the first book of the *Hypotyposes* of Sextus Empiricus, may well have had a common origin.⁴ Both were probably from some writings of the later Pyrrhonists, whom Diogenes mentions by name as his authorities. They are Theodosius, Aenesidemus, Agrippa, Zeuxis — a friend of Aenesidemus — Antiochus of Laodicea, and Apelles; together with Favorinus, the friend of Plutarch, and Menodotus. Diogenes' whole account of Pyrrho and others connected with Pyrrhonism may be taken from Menodotus, as quotations from Aenesidemus are frequently given; yet it abounds in quotations from Timon and Antigonus from whatever source he may have obtained them. Menodotus was a physician from the city of Nicomedia, on the sea of Marmora, situated on a picturesque site at the head of the gulf of the same name. Menodotus was a Pyrrhonist of influence, a scholar of Antiochus of Laodicea. He was at the same time a physician, and at the head of the Empirical School of Medicine. He lived in the second cen-

ture A.D., at the time when later Pyrrhonism was vigorous. He wrote on Pyrrhonism, taking Aenesidemus as his authority.⁵

We see that quotations given by Diogenes from Timon and Antigonus have the greatest claim to genuineness because of their contemporary origin. From Antigonus we learn facts regarding the life of Pyrrho, and Timon furnishes us with the most reliable statement of his opinions.

The testimony of Cicero is in some respects important because it was written before the new Pyrrhonic movement, and there was then no possibility of embellishing the teachings of Pyrrho in the light of later Pyrrhonic thought. On the other hand, however, the source of Cicero's opinions of Pyrrho was mostly the writings of those who belonged to the Academy. These authors might easily attribute Academic teachings to Pyrrho which did not justly represent him.

A very important authority, however, in regard to Pyrrho was Aristocles of Messene, a Peripatetic philosopher, who probably lived about the beginning of the third century A.D. He wrote a History of Philosophy largely compiled from earlier writings, some fragments of which are preserved by Eusebius, in his *Praeparatio Evangelica* written about a century later. Diogenes and Eusebius both quote freely from the writings of Numenius, a Neo-Pythagorean, who probably lived in the time of the Antonines and who wrote a critical philosophical work.

It is evident that by a comparison of the statements of Diogenes and Eusebius, both of whom quote from contemporaries of Pyrrho, we may arrive at comparatively satisfactory results. We should add a certain amount of control from Suidas' article on Pyrrho and a critical examination of all the testimony in the books of Sextus Empiricus concerning the teachings of Pyrrho.⁶

We may assume, therefore, that in this way we are able to secure the real evidence of Pyrrho's contemporaries regarding his philosophy.

Testimony of Cicero

Let us now consider the presentation of Pyrrho that we find in Cicero's writings. Cicero's statements are very valuable, as already remarked, because he is evidently not influenced by the later Pyrrhonic standpoint, and quotes only authorities familiar with Pyrrho's own teaching.

Cicero's testimony regarding Pyrrho is usually considered decidedly different from that of Pyrrho's contemporaries. If it is examined critically, however, we find that it does not differ essentially, except that the manner of life of Pyrrho is emphasized more than his Scepticism. The strongest evidence given by Cicero of the decidedly sceptical standpoint of Pyrrho's philosophy is unconscious. He states that Metrodorus of Chios wrote a book on Nature, in which he says: "I deny that we know whether we know anything or whether we know nothing. I say that we do not even know what ignorance and knowledge are; and that we have no knowledge as to whether anything exists or not."⁷ Cicero was doubtless ignorant of the relation between Metrodorus and Pyrrho through Anaxarchus and did not connect Pyrrho with the Scepticism of Metrodorus.

Cicero paints a two-sided picture of Pyrrho, one side portraying his Scepticism, and the other his ethical standpoint. Cicero associates Pyrrho with his contemporaries, and never with later Pyrrhonic writers, of whom he seems wholly ignorant. He says, "Pyrrho, Aristo and Herillus have long sunk into oblivion."⁸

Aristo was from the island of Chios, and lived in the time of Zeno, the Stoic. His teaching resembled that of the Cynics, but he desired to found a sect for himself. In this he failed. He is characterized as speaking in parables.

Herillus was also a contemporary of Zeno, and is responsible for the saying that the same piece of brass might become a statue of either Alexander or Socrates.⁹

In speaking of what someone had called incidentals that do not affect our real existence, Cicero said, "Do you not know that all those pompous expressions are shared with you by Pyrrho and Aristo, who think that all things are equal?" Cicero quotes Pyrrho as saying that there is no difference between perfect health and the most terrible condition of disease;¹⁰ as advocating *apathia*, an even stronger state of independence of circumstances than *adiaphoria*; and thinking that all things are equal; and that there is no difference between life and death.¹¹

Cicero's interpretation of the Scepticism of Pyrrho seems to refer largely to his indifference to things of the outward world, which he calls incidentals; he does not attribute to him a system of doubt, nor a theory of knowledge, nor an attempt to find a criterion in examining the testimony of the senses. We must depend on other sources of information regarding these aspects of Pyrrho's thought. Cicero's final estimate of the standpoint of Pyrrho, however, is the same as that of Timon and Aristocles. He considered it to be an attitude of indifference (on the ground that all things are equal), as a basis for a well-poised life. Cicero realized that Pyrrho advocated due regard for law and custom. He classes Pyrrho as a severe moralist who believes in virtue as the sovereign good, and that a life of honor is chiefly to be desired.¹² The appreciation of his fellow citizens so fully accorded to him gave him a degree of renown that endured until the time of Cicero, and impressed the latter more than the faint echo of Pyrrho's sceptical teachings. In Roman

tradition these were overshadowed by the later sceptical teachings of the Academy.

Some think that Cicero was familiar with Aenesidemus from his using *epoché* and *ataraxia* apparently in the same sense as did the later Pyrrhonists. There seems, however, to be no proof of this opinion, and even if Cicero did quote a later Pyrrhonic writer occasionally, it would not affect our conclusion that in general he quoted only the early philosophers and had no real acquaintance with later Pyrrhonism.

It is a matter of common knowledge that Cicero was a careless worker, and that his writings are largely compilations in which he constantly contradicts himself, apparently never taking the trouble to read over what he had previously written. As we know that he put quotations together without much regard to their consistency, we may conclude that in his reading he chanced to come upon one or two isolated statements of the later Pyrrhonists. There is no evidence of the thought of Aenesidemus in any of the context in which he speaks of Pyrrho. The radical teachings of Aenesidemus were far removed from the broad path of regular philosophic tradition followed by Cicero, who gathered his material from older writers and had neither the power nor the inclination to carry on any original investigation in regard to contemporary writers, especially one of such different tastes as Aenesidemus.¹³

It is very strange that Cicero, who was familiar with the sceptical teachings of the Academy, does not attribute to Pyrrho any influence in the development of Academic doubt, although he had many opportunities of doing so. There are two places in Cicero's writings where he describes the development of doubt as a philosophic doctrine, and enumerates a list of the names of those who taught this doctrine. We find among them the name of Plato even, but Pyrrho is not mentioned.¹⁴ If Pyrrho was regarded by the Academy as an

authority on doubt, how could Cicero have been ignorant of the fact? It is evident from the writings of Cicero that Pyrrho was not considered, in the Academy, as the originator of the teaching of suspension of judgment.

Considering the history of Scepticism in the Academy, it is not strange that Pyrrho's name does not appear in its records. Arcesilaus, who introduced Scepticism into the Academy, was in constant conflict with Timon, the chief representative of Pyrrhonism, for years after Pyrrho died. Cicero very probably did not realize how much the Academy was indebted to Pyrrho for its sceptical doctrines.

PART III

SCEPTICISM IN THE ACADEMY
FIRST PERIOD

CHAPTER IX

THE SCHOOLS OF PHILOSOPHY IN ATHENS

One cannot understand the full force of Scepticism in the Academy without knowing something of the history of the School, and its relation to the other schools of philosophy in Athens. The scientific society which Plato founded and conducted formed the pattern for the organization of scientific instruction in succeeding ages. Even after other schools were founded, the Academy took the lead.

The two presidents of the Academy who taught a sceptical system of philosophy were Arcesilaus and Carneades. There was an interval of about fifty years between them. After the time of Carneades the influence of Academic Scepticism decreased. In order to estimate the importance of the teachings of Arcesilaus and Carneades upon philosophical development, a definite idea of their surroundings is necessary. One must form a mental picture of the conditions under which they carried on their work, and know as well something of the relation of the schools of philosophy to general society in Athens.

The history of philosophy during the centuries which elapsed between the time of Alexander and Augustus was shaped by the four schools in Athens more than by any other influence. These were the Academy, the Lyceum, the Stoa, and the Garden. During that whole period, the schools in Athens constituted the only university of philosophy in the world. Other schools were gradually founded in Rhodes,

Alexandria, Babylon, and elsewhere, yet Athens was always the center for the study of philosophy.

Although the intellectual life of Athens developed in many different lines, such as painting, sculpture, architecture, poetry, drama, medicine, and philosophy, these four schools were always the sources of productive thought. This was true from the day when Plato opened the Academy early in the fourth century. The Academy, at first, was both a political and cultural power in Athens, but after the end of the fourth century B.C., there was a gradual weakening of the political influence of Greece, and philosophy acquired an even greater ascendancy over the meditative life of the period. The cultured element of society usually joined one of the four schools, for they represented not only philosophic but also religious and ethical standards. The programs of these schools seemed to be sharply defined, yet in fundamental respects they differed less than is often the case in modern sects of religion.¹

There was always some one school among the four where the individual could find what was to him the holy truth. Possibly never in the history of the world has the influence of philosophy been so vital as in the last quarter of the fourth century and during the third century B.C. Every one desirous of having a good education devoted several years to its study. As time went on, interest in philosophy constantly increased. Teachers were to be found in the prominent cities of Alexandria, Heraclea, Lampsacus, Mitylene, Brusa, Chalcedon, Byzantium, and even farther East. When it was at all possible, ambitious youths preferred to attend the original schools where the sources of philosophy were the richest and the purest. Thus it came about that from near and far young Greeks came to Athens, like

the Roman youth of a later age, and often at a great sacrifice.

In these schools the old spirit of Athenian freedom found academic, if not political, expression; for freedom of thought and of teaching was one of their strongest characteristics. In the time of Athens' deepest national depression, therefore, philosophy was a real power and furnished the forces underlying all the outward changes that shaped the history of the age. In a certain circle of Athenian society there was a spirit that feared neither king nor soldier, that could not be bought nor intimidated, and that found the reason for its existence in itself; a force for good or evil, entirely independent of financial or military interests. Philosophy was studied for its own sake, and young and old who felt the philosophic instinct wandered sooner or later to Athens.

The schools, moreover, knew how to preserve their independence. A test case occurred while Theophrastus was president of the Lyceum. He was for the moment the most important teacher of philosophy in Athens, with a following of two thousand pupils. The state at that time tried to gain control of philosophic teaching, and threatened with death anyone who should dare to preside over a school without the sanction of the council and the people. The philosophers were very indignant at the action of the government, and with one accord left the city. They returned triumphant, however, the following year; and the man, a certain Sophocles, who had proposed and carried the obnoxious law, was fined five talents.² Yet there seems thereafter to have been established a slight control of the schools by the Areopagus, for we read that Cleanthes was called to account to explain how he lived. He was able to prove that he worked at night in order to study by day, and produced as witnesses

the gardener in whose garden he drew water, and the caterer whom he helped to prepare meals. Hearing this, the Areopagus offered him the sum of ten minae for his support, which he refused to accept.³ Without doubt, Athens did her best to keep the center of philosophy within her walls, by showing favor to the schools of which she must have been justly proud.

Athens was truly the university of the ancient world. Thousands of pilgrims from every land journeyed to the philosophic schools and gymnasia of the "mother of arts and eloquence." Under the shadow of the Areopagus they discussed those fundamental principles that helped to form the theoretic structure of ancient beliefs. The direct and indirect influence upon the world in general of the lectures delivered in the schools was very great. Large audiences often assembled to listen to the orators there, and the lectures were usually published afterwards and widely circulated. The presidents and instructors created the philosophic literature of the age, and its abundance resulted from the enthusiasm of the men in authority. Their lectures probably composed the greater part of the books on philosophy written after the time of Aristotle. They were often presented in the form of dialogues, in imitation of Plato.

The organization of the scientific life of the Greeks was not a late development, but existed from earliest times. Associations of various kinds were formed under religious charters, and thus learning found a method of organization ready at hand. Thales was at the head of a school of philosophy in Miletus, and Pythagoras, in Croton. Greek life and Greek religion were one in the common custom of the day, and the religion furnished the organization which was used

apparently without any discussion by the schools of philosophy.

Religious societies were of three kinds, a Thiasos, an Eranos and an Orgeon. A Thiasos was especially devoted to learning; an Eranos included business interests; an Orgeon embraced public worship of the gods in its program. Solon speaks of the members of a Thiasos, and also of the Orgeon of a temple, according to Caius, in his fourth book on Solon's twelve tables of law; and Homer refers to the Eranos, thus proving all of these organizations to have been ancient institutions.⁴ Sappho's school, in the time of Solon, was also an illustration of organized learning, for she taught dancing, music and the technique of poetry, all of them arts that were used in religious worship. There were other schools of the same kind in Mitylene in Sappho's time.

Of these societies, the Thiasos was the most important, and the schools of philosophy in Athens with slight modifications were representative Thiasoi. An Eranos was at first especially a business organization. Homer uses the term to designate a feast, the expenses of which were shared by the guests; in later times an Eranos was evidently either a civil or religious club. Many later writers use the term Thiasos and Eranos interchangeably. An Orgeon took charge of the sacrifices and ceremonies of a temple, but eventually all three terms seem to have been used with practically the same meaning. All three were open to women, and in some instances to slaves. Euripides says, "I see three Thiasoi of women coming."⁵

The organization of the Lyceum was similar to that of the Academy, but that of the Stoics resembled an Eranos, although the Stoic School afterwards followed the usual customs of a Thiasos.⁶ In the Epicurean school the founder

took the place of the divine patronesses and the memorial banquets were given in his honor, but in other respects the customs of a Thiasos were kept up.

Organization of a Thiasos

The word Thiasos comes from Theos, the Lacedemonian form of which was Cios, a word of Ionian origin. It was a kind of close corporation that carried all the weight of a judicial association, but, in the beginning at least, was essentially religious and connected with the cult of Dionysus. It was formed by dedicating a house or an institution to the Muses, which then became a Thiasos Museon, or Temple of the Muses.⁷ When the great reform of the Orphic movement occurred, one center of which was at Lesbos, many Thiasoi were formed and dedicated to the gods. Sappho's school, for instance, was a House of the Muses, a Thiasos to Aphrodite, associated with the sacrifices and feasts to this goddess.⁸ Thus a Thiasos was a religious organization, placed on a high plane of independence, presupposing a kind of infallibility in religious matters beyond the reach of legislation. The state had nothing to do with forming a Thiasos, or making its laws, and it could interfere only if the Thiasos undertook something unlawful, such as using government property, or holding of property illegally.

Although the Thiasos was originally connected with the worship of Dionysus, each Thiasos could make its own statutes, within certain limits. In the ruins of an old temple of Dionysus in Athens, an inscription has been found giving the statutes of a Thiasos. This was on an old column standing in a hall, called the Bakcheion, where the Thiasos met. The rules were given in great detail and were written in two columns one hundred and sixty-seven lines in length.

The name of this Thiasos was the Iobachei. Iobachos was a title of Dionysus, and some Dionysiac symbols were at the head of the columns. The date was about the third century B.C., judging from the style of the inscription.⁹

The relation of an educational Thiasos to the government was analogous to that of modern colleges to municipal control; with this difference, that the property of the Thiasos officially belonged to the Muses, although it was controlled by the president of the school.¹⁰ A Thiasos was, in fact, a private religious cult, and could be large or small, as one of the rules of the "House of the Decalions" was that each member should bring three witnesses from his own Thiasos, if there were that many.

There is a description given by Athenaeus, taken from Antigonus of Carystus, which gives us important information about the officers of a Thiasos. There were one or more keepers of the temple (whose business it was to offer sacrifices to the Muses), a curator, and a master of ceremonies.¹¹ A feast was held every new moon, and from the time of Plato on it was customary to recognize the religious character of the feast by a ceremony. After the members of the school had supped and made libations, they sang paeons to the god with all customary honors. On such occasions the master of ceremonies received a sum of money from each member, sometimes fixed at nine obols. There were regular laws about holding a symposium in the schools. We have in Plutarch a description, familiar to many, of the way a symposium was conducted in later times, comparing it with some more ancient customs.

Of the four most important Athenian schools of philosophy — the Academy, the Lyceum, the Stoa, and the Gar-

den — three were situated outside of the walls of the old city, the Stoa alone being within. The Lyceum was near the river Ilissus. It was originally a gymnasium attached to the temple of Apollo Lyceus. In this school there was a covered portico, called Peripatos, for exercise in bad weather, which was the origin of the term *peripatetic*.

In its early years, the subjects taught in the Lyceum were especially the biological, social and historical sciences. When the Lyceum was founded there already existed two schools in Athens for higher education. One was Plato's Academy, devoted to political, metaphysical, ethical and mathematical research. The other was that of Isocrates, mainly devoted to practical preparation for public political life.¹²

The Garden of Epicurus must have been on the road between the Dipylus Gate and the Academy, for Cicero said, when he was walking out to the Academy one day, that they had just passed the gardens of Epicurus where he had often been with his friend Phaedrus.¹³

Brief History of the Academy

The oldest of the four schools was the Academy and its site was the most beautiful. Plato, on his return from his first journey to Sicily in 387 B.C. or thereabouts, founded the Academy, under the protection of the Muses, to whom he immediately dedicated the school. This was the first philosophical society in Attica. Plato, with his own money, bought a garden planted with trees, a small place, for which he paid only three thousand drachmas.¹⁴ This garden had already been called after an ancient hero, "Hecademus," whose name will be forever symbolic of the purest and

highest scholarship. The Academy was six furlongs from the Dipylon Gate of Athens, on the road branching off from the way to Eleusis, and leading through olive groves.¹⁵ In the outer Ceramicus, near the Dipylon, the road threaded the monuments erected to ancient heroes of Greece.¹⁶ Pausanias speaks of the tombs of Pericles and Chrysippus as being on the way. Passing under the spreading branches of the sacred olive trees, just beyond the village of Colonus, the birthplace of Sophocles, lay the site of the Academy, where a gymnasium had already existed. The garden of the Academy was surrounded by a wall, and was used in common by the members of the school like sacred ground. In the trees the cicadae sang, as Timon says, "The musical grasshopper that chants in Hecademus' trees." Here Plato built the temple to the Muses, here he lived and taught, and near the temple in the Academy he was buried.¹⁷ In the garden were statues of the goddesses, first erected, perhaps, by Speusippus, who is said to have set up images of the Graces in the temple of the Muses which Plato had built in the Academy. In the temple, sacrifices were offered to these guardians of knowledge. This example was followed by those who came after Plato, and outward respect for the religion of the people was maintained by the early presidents of the school, even in its most sceptical period.

The Academy belonged legally to the goddesses as long as the religion existed which made goddesses possible. Plato planned wisely, insuring the well-being of his school for nearly a thousand years, until the state, under Justinian, pronounced the goddesses non-existent and confiscated the property. This caused, at the same time, the downfall of the goddesses and the death of the Academy. During this long period the regular income from the property was a

great asset even when the lectures were given elsewhere. In later times the value of the garden increased. In the beginning the income was only three gold pieces, the salary of the president, but later it was more than one thousand gold pieces. Additions were made to the property, and patrons of science bequeathed money to the institution to enable scholars to pursue the philosopher's life.¹⁸

The president of the Academy was chosen by vote and held the position for life, unless, for some personal reason, he wished to resign. Lacydes, for instance, resigned in favor of a successor. The president outlined the principles of philosophy to be taught, and all his followers conformed to them; yet neither the younger nor the older members of any school were confined to the teachings of any one system, but broadened their views and increased their knowledge by frequently attending the lectures of other schools. Besides the president, there was always a group of professors, or in modern terms a faculty, the members of which probably did not receive salaries, but may have lived on the property. Many of these mature students never succeeded to the presidency, although some of them taught for years, loyally following their masters, even to the grave.

The allegiance which the members felt to the school is shown in a marked degree by some who were able to found separate institutions, but who did not do so, preferring to remain in subordinate positions rather than to detract from the power of the Academy. Some of the great men attained the presidency only at a comparatively advanced age. Arcesilaus himself is a good example of this, and Clitomachus, the successor of Carneades, an even better one. It often happened also, as is the case in all institutions of learning, that some of the professors were greater than the president. For exam-

ple, Crantor, who died while Polemo was president, was a deeper thinker than his master.

The members of the Academy spent much time in study, and it is related of one president, Lacydes, that he took up geometry late in life, concerning which some one said to him, "Is it time for you to be studying now?" He replied, "If it is not, when will it be?" The average term of the presidency in the Academy, from the time of Plato to that of Clitomachus, was twenty-four years.¹⁹

From the founding of the Academy it was the custom to receive women students, and two of those who studied under Plato are mentioned by name. At first the teaching was free, the Sophists only incurring the reproach of selling their wisdom. Speusippus, the nephew of Plato and his successor, was the first to exact fees from the students. Some of them were evidently unwilling to pay, for they brought the imputation against Speusippus that Plato had never demanded payment, but under him, whether willing or unwilling, they must pay. In due course of time, however, there were regular prices fixed for their services by all teachers.

The successors of Plato continued to teach in the Academy for several generations. The members of the school gradually built houses around the garden, and formed a small academic colony near the temple of the Muses. There they passed rather a secluded life, devoting themselves to the ideal world in which they lived. Plutarch says that Xenocrates left the garden only once a year, and then in order to be present at the Dionysian tragedies. As time went on, however, the topography of the city of Athens gradually but constantly changed, and, through the neglect and tyranny of Philip III of Macedon, the garden at the Academy

became unhealthy. Even in Plato's time, objections were made to the site on account of its low position, but Plato is reported to have said, "I would not live on Mt. Athos even, in order simply to grow old." Antiochus is the first president of the Academy who is spoken of as teaching elsewhere, probably in the city, but at the same time he may have continued to hold occasional assemblies in the Academy outside of the city.

When Cicero visited Plato's Academy, while he was still a young man, he spoke of hearing Antiochus lecture in the Ptolemeion, a building on the side of the Acropolis, of which a single broken column remains at the present time. Antiochus became president of the Academy about 79-78 B.C. Cicero also spoke of a seat in the Academy at which he was then looking, which Carmades had recently occupied, and said that he was greatly affected by seeing it, as he seemed to see Carmades sitting there with whom he was acquainted and whose features he knew well. As Carmades preceded Antiochus, it may be that Antiochus was the first to break away from the Academy and give his lectures elsewhere.²⁰

Each of the three other schools imitated the Academy in its organization, and we find the thought of Plato the ruling element in the methods of teaching, in the arrangement of the school feasts, and, in fact, in all philosophic enterprise to the end of the existence of the old schools of philosophy.

To the older Academy belonged men of fine personality and great learning: Plato, Speusippus, Xenocrates, Polemo, Crates and Arcesilaus. All of these men held fast to Plato's plan in regard to the subjects of the curriculum. Unfortunately, no attention was paid to science in the Academy; mathematics only was taught besides philosophy proper. The speakers sometimes remained seated while lecturing.

Polemo, however, is described as having departed from that custom, and to have walked about while delivering his addresses. At various times the Socratic method of discussion was used, some preferring to encourage free expression of opinion on the part of their hearers, but the regular custom in classroom teaching was more formal.

It is very easy to visit the old site of the Academy, for it is one of the few places in the world where the name has not been changed with the passage of the centuries. Standing there, where Plato himself so often stood, one's first impulse is to look up at the Acropolis, and then one discovers that the Acropolis, so much in evidence from the environs of Athens, has apparently disappeared, for the Academy is one of the few places in the vicinity from which the Acropolis cannot be seen.

CHAPTER X

ARCESILAUS, PRESIDENT OF THE ACADEMY

(315-241/0 B.C.)

Arcesilaus was born in Pitane in Aeolia, and was the son of Seuthes, or Scythes.¹ His training was a broad one and accounts for many of the characteristics of his later life. His first teacher was Autolychus, the oldest Greek mathematician (with the possible exception of Euclid) whose writings we possess.

Autolycus was either contemporary with Euclid or slightly older. He wrote *Motion of the Spheres* and *Rising and Setting of the Fixed Stars*. These books still exist, with omissions, changes, and additions. There is also a tradition of a third book on the Planets.²

Arcesilaus studied under Autolychus in his native city, and travelled with him as far as Sardis. He was helped by his half brother, Pylades, to leave Pitane, and he went to Chios and thence to Athens. According to the authority of Antigonius of Carystus, Arcesilaus studied mathematics with Hipponicus, whom he characterized as so lazy that geometry had flown out of his mouth while he yawned. He also studied the theory of music with Xanthus in Athens, and is said to have read Homer every night before going to bed and again in the morning. He was familiar with the rules of dialectic, and the discussions of the Eretrian School.

Before entering the Academy, Arcesilaus studied under Theophrastus who was then president of the Lyceum, and

was decidedly the most advanced thinker of his time. He spoke well of the ability of Arcesilaus, and characterized him as being in earnest. Under him Arcesilaus enjoyed the most inspiring teaching then available. Theophrastus was primarily a scientist, but Arcesilaus did not subsequently show especial interest in the natural sciences. He was apparently more impressed by other lectures he attended in the Lyceum. We find traces of the strong influence of Theophrastus in the criticism of Arcesilaus of the fundamental concepts of philosophy especially, and the teleological teaching of Plato and Aristotle. This influence also appears in the pragmatic tendency of Arcesilaus regarding the origin of the relative character of the judgment in ethical problems. As a student in the Lyceum he must have had access to the large library of Aristotle, to which Theophrastus had made many additions. Arcesilaus himself possessed all of Plato's writings.

Polemo, Crates, Crantor, and Arcesilaus were friends and were associated with each other in the Academy. According to Antigonus of Carystus, Crantor was devoted to Homer and Euripides; Polemo, to Homer and Sophocles; and Arcesilaus especially to Homer, although he also studied Pindar and Plato constantly. Polemo and Crantor had entered at the same time as pupils of Xenocrates, and Crantor introduced Arcesilaus later. Arcesilaus was so much pleased with the teaching in the Academy when he came over to it, that he said of Polemo and Crates that they were gods. Crantor and Arcesilaus lived together in Crantor's house, and when the latter died he left his property, amounting to twelve talents, to Arcesilaus. The friendship of these four men is one of the most striking instances in the history of the Academy of the triumph of devotion to the school over per-

sonal ambition. Crantor and Arcesilaus were both stronger men than Polemo and Crates, under whom they worked. Crantor refrained from establishing a separate school when he might have done so and Arcesilaus lived to middle age before he taught prominently the theories for which he afterwards became renowned.³

Polemo was leader of the Academy from 314-270 B.C. Then followed Crates, and at his death, a certain Socratides was chosen president, but he resigned in favor of Arcesilaus. As Arcesilaus was forty-five years old when Crates became president, he could not have been far from fifty when he succeeded him to the leadership of the Academy, although the length of Crates' presidency is uncertain. It was not, however, a long one, as Arcesilaus, who died in 241 B.C., must have held the office many years. According to Plutarch, Arcesilaus had begun to speak and to teach his theories while Epicurus was still alive, i.e., before 270 B.C., and during the presidency of Polemo. It is said that the glory which Arcesilaus had, even at that early stage of his career, troubled Epicurus, yet the theories that are attributed to him are not spoken of as having been prominent in the Academy during the leadership of Polemo and Crates.⁴

The tendency of the Academy under Polemo and Crates was in the direction of ethical problems and not of dialectic speculations. Polemo was much honored and admired in Athens for the idealistic character of his teachings.

Arcesilaus is said to have been more beloved by the Athenians than anyone who had preceded him, at least since the time of Plato. He was rich and fond of pleasure, and was sometimes considered a little vain, especially of his learning. He had, moreover, a very keen sense of humor.

From the scanty data to be found in regard to a personality so remote, and described by few writers, we have a picture of an im-

pulsive, generous man. He was free with his money, fond of luxury, and careless in regard to personal morality, and was, therefore, sometimes called the new Aristippus. Some illustrations of his thought and care for others are quite renowned and show characteristics often found in Greek philosophers. Many instances are related of his kindness, generosity and self-control. When Hipponicus, his teacher, temporarily lost his mental poise, he took him into his own house until he recovered. When his friend, Apelles of Chios, was ill, knowing him to be poor, he took him twenty drachmas, and sitting down beside him, he said with exquisite grace, "There is nothing here but the elements of Empedocles — fire, water, earth, and the balmy expanse of the air, but you do not lie comfortably!" With that, he moved the sick man's pillow, and tucked the money under it. When the old housekeeper found it, and wonderingly told Apelles of it, he laughed and said, "This is some trick of Arcesilaus." Other instances of the same kind are given, showing that he was always ready to give money to his friends, and to do a service without parade, and that he shrank from expressions of gratitude.⁵

Arcesilaus loved oratory, and enjoyed nothing so much as to sway his audience. His manner of speaking was impressive, and he displayed great learning. All who speak of him emphasize his love of argument. He is said to have hypnotized his hearers with his brilliancy and to have been a most convincing speaker, possessing a grace and beauty of diction that the Stoics lacked.⁶ His critics accused him of being a popularity hunter. Timon in one of his epigrams refers to this supposed vanity, comparing him to an owl admired by finches, and saying, "Why do you give yourself airs for such a trifle as being able to please the people?"

Arcesilaus was accused of many unprincipled actions in his private life, but Cleanthes, although of a rival school, said of him that he was not as bad as he sounded.

Timon also implied that Arcesilaus was sometimes ruthless in speaking to his students, for he accuses him in one of his *Silli* of attacking a young man with biting sarcasm.

The question of authorship in connection with Arcesilaus is doubtful. Some say that he wrote no books, but others disagree with this statement. His lectures certainly may have been published. At one time he tried his hand at poetry, as epigrams written by him testify. One of these was addressed to Attalus, in which he foretells the greatness of Pergamus. Certain of his lectures in the Academy were addressed to Eumenes I and certain of Crantor's books were by some authorities attributed to him.

In general, Arcesilaus followed strictly the Academic tradition of keeping neutral in political affairs. He was, however, in close friendly relation with Eumenes I and Attalus I. He seems to have also had a long continued friendship with a Macedonian commander of Munychia, one of the harbors of the Piraeus. At one time he accepted an embassy to Demetrius, a town in Thessaly, in the service of Antigonus, and succeeded in his mission.

Arcesilaus spent much of his time in the Academy, seeking recreation in trips to the Piraeus and elsewhere to visit friends. He was a man without small jealousies and was quite ready to help a student to join another school should he so desire. He had a brilliant mind and loved study for its own sake.

Relation of Crantor to Arcesilaus

The influence of Crantor over Arcesilaus was Socratic, and has not been sufficiently considered by those who have

attempted to trace the development of his philosophy. Crantor wrote a celebrated book called *On Mourning*, to which Cicero's *Contempt of Death* bears a close resemblance.⁷ This work of Crantor's was also the source of Plutarch's *Consolation to Appollonius*, as Plutarch himself testifies. Plutarch's work closely resembles the last half of the first book of Cicero's *Tusculan Disputations*, so that the influence of Crantor over both is undoubted and so strong that by a comparison of similar thoughts in Cicero's and Plutarch's citations, Crantor's theories may be understood.⁸ Crantor's ideas about death resemble those of Socrates, as given in the *Apology*, rather than those of Plato. Crantor took the ground that death is not an evil, whether it is the continuation of life or the end of it. This was Socratic rather than Platonic, and dogmatic rather than sceptical. Panaetius considered Crantor's *On Mourning* so fine that he advised Tubero to commit it to memory, and as Panaetius himself did not believe in the immortality of the soul, his opinion sustains the impression of the book that we get from Cicero and Plutarch. Thus we see that Crantor differed from Plato, who in many of his writings endeavored to establish the concept of immortality of the soul, and emphasized rather the opinions of Socrates.

The writings attributed to Crantor numbered in all 30,000 lines, of which it is possible that Arcesilaus wrote a part.⁹ Besides the book *On Mourning*, Crantor wrote a commentary on Plato's *Timaeus*, the first work of its kind.¹⁰ His style was graceful and free, as is especially well shown in a comparatively long fragment from a third book of his quoted by Sextus Empiricus.¹¹ At the time when Arcesilaus was passing through a period of vacillation and was uncertain of his course, Crantor's influence was evidently strong in bring-

ing him to what he considered the true fold, i.e., the Academy.

Crantor seems to have been a very original man, and when he could not find expressions that suited him, he would create new ones. For example, there was one tragedian whose voice grated on him, and he said that he had an unhewn voice, full of bark. He characterized the verses of a certain poet as being full of moths.

When Arcesilaus finally entered the Academy, it was Crantor who was directly responsible. He said to Arcesilaus one day, "If I save you, will you be grateful?" Whereupon, Theophrastus, president of the Lyceum, greatly regretted losing his brilliant pupil.

The Method of Teaching of Arcesilaus

Cicero gives us an exact description of Socrates' method, which was to question all who were present and argue with them at his own pleasure, the livelier the discussion the better. This custom had not been kept up after Socrates' death, but Arcesilaus re-introduced it, and announced that those who wished to become his pupils must state their own opinions and defend them as well as they could. Many were afraid to come to him on account of his severity, but in the end, this very quality of frank sincerity filled his lecture room.

The method of Socrates had been due in part to his own personality, and his immediate followers apparently did not attempt to apply it. It was the Sophists' habit of teaching to give regular lectures. When the Academy opened, however, the plan introduced by Plato was one of more or less formal lectures in the classroom, and from that time on,

it gradually became the general custom for the leader to present his ideas in an uninterrupted discourse.¹² When Arcesilaus became president, he changed the method of teaching in the classroom, and went back to that which Socrates had used. Thus, Arcesilaus was said to have been the first to introduce into the regular exercises of the classroom the method of arguing on both sides of a question. He was a strong exponent of this form of procedure because it not only suited his philosophical method, but was also in harmony with his love of keen and destructive dialectic. The motive of Arcesilaus in introducing it was not, certainly, to prove the old system incorrect, but rather that he wished to find the strongest way to introduce new ideas. The method of Socrates was most appropriate for his aim and doubtless helped greatly in producing the result that he desired. The critical reasoning and oratorical power of Arcesilaus himself weakened arguments that seemed invincible to his opponents, until little by little he brought them to accept his point of view. Arcesilaus took great pride in claiming that by changing the form of procedure he had brought the Academy back to the methods of Socrates.

CHAPTER XI

THE PHILOSOPHY OF ARCESILAUS

The School of Plato from the time of Xenocrates onward was characterized increasingly by a speculative tendency. This trend of thinking culminated early in the third century B.C. in the definite announcement by the Academy of a new departure, on the basis that a criterion of knowledge cannot be found. This was called a return to the teachings of Socrates.

The definite change in the policy of the Academy took place under Arcesilaus, the first great leader after Plato, and a younger contemporary of Pyrrho. Thus the most prominent school of philosophy in the world publicly proclaimed a sceptical platform. This was both the triumph and the submergence of Pyrrhonism.

Beginning of Academic Scepticism

The part that Pyrrho played in bringing about the great change in the Academy cannot be disregarded. He must have been more influential than appears in history. Pyrrho and Arcesilaus were contemporaries for many years, and Arcesilaus and Timon were philosophical rivals in Athens at the time of the greatest significance in the work of Arcesilaus. Pyrrho's teaching, as far as he was personally concerned, was confined to Elis, and possibly he did not come into close personal contact with Arcesilaus. Timon, however, was

likely to meet his opponent whenever he crossed the agora in Athens. Timon's eloquence as a writer and the power of his sarcasm must have made the life of Arcesilaus miserable, and it was something that the latter could never escape. He did not even have the satisfaction of outliving Timon, but had to leave the field to his rival. Arcesilaus also may have known Pyrrho. Elis was not far from Athens, and Pyrrho was a man of reputation in Greece. In any case, his teachings were well known through Timon who gave a widespread circulation to the statement that neither the senses nor the reason have given us the truth. Between this statement and the final conclusion of Arcesilaus, there was no appreciable difference.¹ The clear thinking of Timon, constantly and publicly expressed, must have had some influence in the development of the theories of Arcesilaus. Thus the intellectual side of Pyrrho's Scepticism lived in the Academy under a slightly different form. We cannot say the same, however, for his peculiar psychological aim of *ataraxia*, which remained his own legacy to his followers.

Academic Scepticism gave no credit to Pyrrho, and he seems never to have been mentioned in the history of the thought of the Academy. Cicero, for example, had not heard of his sceptical teachings, except in their general result of an attitude of indifference toward worldly goods. There were several reasons for this. First, it would not seem that contemporary judgment regarded Pyrrho and Arcesilaus as altogether alike in their theories. Timon was one of the most outspoken critics of Arcesilaus, and never considered his Scepticism as the real thing; in fact, he said to him on one occasion, "What are you doing among us free men?"² Again, after the time of Pyrrho, the records of philosophic development upon which the world has most relied have

been those of later writers in the Academy. These men would not have been able to discriminate in regard to Pyrrho's influence over the early doctrines of the sceptical period of their school. Furthermore, the personal rivalry between Timon and Arcesilaus may have prevented the latter from realizing how many ideas he borrowed.

History accords to both Pyrrho and Arcesilaus the origin of *epochê*. Pyrrho, being older, must have been the first one to use it, but Arcesilaus was certainly the first to present the idea in a dialectic form.

"Would Academic Scepticism have developed had Pyrrho never lived?" In a certain sense, "Yes." Plato and Socrates were the direct forerunners of the later evolution of their school, and dialectic Scepticism was a consistent link in the chain of the history of thought in the Academy. It is not too much to say, however, that the influence of Pyrrho and his followers stimulated the early Scepticism of the Academy.

The methods of Pyrrho and Arcesilaus were so different that the practical identity of their issues was often lost sight of by later writers. Pyrrho reached his results in the use of the empirical arguments of the Democritan stamp, which were in great contrast to the dialectics of the Academy. The germ of Scepticism in Democritus grew into Pyrrhonism. Some of the ancient authorities on Arcesilaus, however, noticed the strong resemblance between the two types of Scepticism, of which possibly he was unconscious.³

Arcesilaus, as has been already implied, never acknowledged any debt to Pyrrho, and his influence was so strong, and the centre of the new Scepticism so important, that Pyrrhonism rapidly declined. After the death of Timon it ceased to exist in Athens. The Scepticism of the Academy, on the other hand, was widespread and powerful. The

strength of Pyrrhonism in Alexandria from the time of Ptolemy I onward was not realized in the philosophical world represented by the Academy, even as late as the time of Cicero and Seneca. Cicero remarked that Pyrrhonism was extinct, and we have the well known sarcastic saying of Seneca, "*Quis est qui tradet praecepta Pyrrhonis?*" Pyrrhonism, however, was not extinct. Even as early as the time when Arcesilaus introduced Scepticism into the Academy, Pyrrhonic principles were beginning to gain an influence in Alexandria. During the subsequent period of the development of medical science in that city, Pyrrhonism also grew apace. Many of the physicians were especially interested in Pyrrhonism and promoted its teachings. Sextus refers to the "*Older Sceptics*," as if there were two recognized periods of the Pyrrhonic School, and indeed, two centuries later thereabouts, Pyrrhonism again became an organized movement.

During the early years of the Academy, Plato's teachings furnished the criteria of truth. It was not thought necessary to seek the truth, for Plato had found it. After Plato's death the Academy gradually reverted to the questioning attitude of Socrates. This tendency was even shown in some of the later dialogues of Plato. Scepticism in the Academy was the result of growth around its own hearthstone, as a later historian characterized it. He claimed that doctrines foreign to those introduced by Plato were soon taught by his followers. The decided sceptical tendency that developed in the Academy was common throughout the history of Greek thought. This was seen not only in the later leaders of the Academy but in many others, among whom were Stilpo, Metrodorus, Anaxarchus, Pyrrho and Timon.⁴ Cicero speaks of the method of doubting on every subject, and of

discussing everything without ever venturing the assertion of a positive opinion, as Socratic. The attitude of doubt that was attributed to Socrates and which became far-reaching in later Greek philosophy, developed in two distinct lines. One of these was the dialectic Scepticism of the Megarians and of the Academy; and the other, the empirical Scepticism of Metrodorus, Pyrrho, Timon, and the later Pyrrhonists. There is no authority for claiming that Arcesilaus himself intended to found a new school, but it is evident that he felt that the Academy was drifting away from its first moorings and that it must be brought back to its original starting point, which was not Plato, but Socrates. Even Philo of Larissa, the friend of Cicero, denied in his books that there had been two Academies, and the division of the history of the Academy into periods dates from Antiochus, the pupil of Philo and teacher of Cicero. Contemporary judgment of the course that the Academy was taking would probably have been that its tendency was gradually changing in the direction of Scepticism. Subsequent judgment was that there had been a great change, and that it must have taken place during the presidency of the strongest man. Later writers did not all unite, however, in attributing the change to Arcesilaus, for Suidas and Diogenes both say that Lacydes, his successor, founded what is called the Middle Academy.⁵ In examining the teachings of the leaders in the Academy before the time of Arcesilaus, and even directly after Plato, further proof is found that the change was gradual. They did not at first seek to add anything, but only to examine that which Plato had bequeathed to them. This led to much questioning, and eventually to the conviction that truth could not be found. The method of dialectic of Socrates was more and more in evidence, and free criti-

cism was gradually substituted for definite statements. Cicero, however, quoting probably from Antiochus, says that Arcesilaus rose up to overturn the established philosophy.⁶ This is an impossible standpoint, as we shall see in our investigation of the details of his teaching. He wished to keep the school loyal to Socrates, an aim which became especially prominent during the leadership of Polemo. The change which gradually occurred in the standpoint of Academic teaching was attributed by the later world entirely to Arcesilaus, because of his brilliancy as an orator, and also because of the larger sphere of influence which he enjoyed over his predecessors.

There is no doubt that Arcesilaus introduced the formula of *epoché* into the Academy, although it was not original with him; all evidence agrees on that point. He himself traced the fundamental theories of Scepticism to Parmenides, Heraclitus and Socrates. We must admit that he had some reason for calling *epoché*, or suspension of judgment, Socratic, as Socrates taught that he knew nothing. By introducing the terminology of Scepticism into the Academy, however, Arcesilaus strengthened the impression that he had changed the established philosophy and was consequently called by posterity the "Founder of the Middle Academy."⁷ The Old Academy continued until after Crates. The Middle Academy was that of Arcesilaus and his followers; the Third and New Academy was that of Carneades and Clitomachus; then followed, some add, a Fourth, that of Philo and Charmadas and their followers; and some even name a Fifth, that of Antiochus and his followers.

The Theory of Knowledge of Arcesilaus

Thus the theory of knowledge of Arcesilaus was not a sudden creation, announced to the Academy as a basis for Scepticism, but it was a slow and gradual development, the result both of the natural tendency of thought of Arcesilaus himself and also of the constant discussions that arose in response to the attacks of Timon, Zeno, and others.

The materialistic teaching of the Epicureans, among other things, attracted the scorn of the Academy. Epicurus had bought his garden outside the walls of Athens about the year 306 B.C., shortly after the Stoa was opened (310 B.C.), and there maintained the thesis that sensation is the basis of all knowledge, and that sensuous experience yields us the truth. He said that the mind creates from material furnished it by the body.⁸

We may sum up the three contemporaneous influences which worked upon the mind of Arcesilaus, outside of the Academy itself, as: 1. the Scepticism of Pyrrho; 2. the theory of knowledge of the Stoics; 3. the materialism of the Epicureans. In the arguments of Arcesilaus against his opponents, his chief attack was made upon the Stoics. It was directed, first, against their superficial optimism regarding the possibility of knowing the truth; secondly, against their belief in the intuitive conviction of the wise man as enabling him to recognize the truth.

As Arcesilaus developed his arguments in discussion with his opponents, his own theory of knowledge was gradually formed. It furnishes us for the first time in history with a critical analysis of the human instrument of thought and of

its methods of operating. The result is a great scientific conquest. As we realize to what an extent our intellectual life is limited in forming judgments upon fragmentary pieces of evidence, which we strive to combine and to corroborate as best we can, a new idea emerges. It is in primitive form the idea of the relativity of knowledge. The discovery of this epistemological basis has wholly changed our methods of dealing with many of the fundamental problems weighing upon the human mind.

It would appear that Arcesilaus maintained that a criterion of truth is impossible. His arguments were somewhat as follows: The Stoic doctrine of the *phantasia kataléptikê*, or immediate perception, is fundamentally inconsistent. There is no perception that has in itself the power to recognize truth, and that could not possibly be deceived. Assent to an idea as true is an act of judgment, and, like all judgments, cannot rise above opinion. There can be no experience that bears the absolute impress of truth, and as the philosopher can only accept absolute knowledge and cannot be satisfied with mere opinions, he must have a criterion of truth that is trustworthy. Such a criterion cannot be found. An unerring criterion must rest not only upon an idea, but upon a judgment, and judgment cannot be a criterion of truth, for we have no criterion of judgment to prove that it cannot err. Judgment must bear the stamp of absolute certainty, or it is not truth. The assent to what is apparently absolutely certain, however, sometimes arises from false representations, as in dreams, insanity, and delirium. In fact, there is no perception originating in what is true of such a kind that there might not be a similar one originating in what is false, and there is no criterion to distinguish false from true representations. Certain knowl-

edge is, therefore, he said, impossible, and there is no absolute criterion of truth.

One of the strongest characteristics of the theory of knowledge of Arcesilaus was the sharp distinction that he drew between opinion and knowledge. He maintained that there is no criterion that can prove the difference between opinion and knowledge. He said that what is called knowledge rests on the judgment, and as there can be no criterion of judgment, there is, therefore, no criterion of knowledge, and all so-called knowledge must be only opinion.⁹

The critical character of the Scepticism of Arcesilaus resembled that of Pyrrho, but, on the other hand, it was not altogether the same. Pyrrho taught that the results gained from sense perception differ according to condition and environment, and are consequently untrustworthy. He claimed that sensations have apparently only a relative value, and do not necessarily give us the truth concerning the outer world. He does not go so far as to assert that truth cannot be found. The result of Arcesilaus' theory of knowledge is more nearly a dogmatic one. As we have no criterion by which to distinguish between a false and true idea, we can never be sure that we know the truth. The Pyrrhonists claimed that in consequence of the contradictions in the results of sense perception, they could not consider that they had yet found truth. Arcesilaus, however, is said to have asserted that it is impossible to distinguish between knowledge and opinion.¹⁰ The critical method of Arcesilaus created a distinction between the empirical Scepticism of the Pyrrhonists and the dialectic Scepticism of the Academy.

The opponents of Arcesilaus were quick to attack the inconsistency with his sceptical teaching of the statement that truth cannot be found. He replied that he taught sus-

pension of judgment even regarding the theory that nothing can be known. By this statement Arcesilaus showed that in his time the difference between Academic Scepticism and Pyrrhonism was largely a matter of method.

The Eulogon

The criterion of the *kathorthoma*, or perfect action, is the *eulogon*, or that which appeals to the reason, as a rule of conduct.

Arcesilaus did not teach the doctrine of probability in relation to knowledge. He did, however, introduce a somewhat similar principle into his ethical teachings which he called the *eulogon*, or the reasonable, but this idea does not appear in his theory of knowledge. Discussion in all the schools at the time of Arcesilaus centered in the criterion of truth. The fundamental aim in all of them in their search for truth was to find the way of life that would produce well-being. To this end each school proposed its own method.

In practical ethical teaching the Academy had much in common with the other schools. This was true even in the time of Arcesilaus, when, according to the opinion of Sextus Empiricus, the Scepticism of the Academy was most pronounced. Even between Pyrrho and Arcesilaus the chief difference was in method. Both advocated *epochê*, and both accepted the desirability of *ataraxia*, but with Pyrrho *ataraxia* was an aim, while with Arcesilaus it was not especially emphasized. Pyrrho followed his great forerunner, Democritus, in making a state of the emotions the basis of the right kind of life. Democritus sought *euthymia* and Pyrrho, *ataraxia* as the desirable aim, that is, the highest good. With a spirit of calmness and an undisturbed condition of inner

experience, Pyrrho hoped ably and adequately to meet the exigencies of life.

In the Academy, the highest good was considered to be virtue, or its equivalent, knowledge. Arcesilaus called virtue the perfect action. This should be based on knowledge. As, however, he stood firm on the basis of suspension of judgment in regard to knowledge, there could be no fixed ethical system. In the line of Academic thinking, he turned to the reason for help in this difficulty, and proposed a method based on the reason to meet the practical problems of a way of life. He said: "Well-being survives through practical wisdom, and practical wisdom has its being in perfect action, which comes into existence through the reason."¹¹ Thus we see that the difference between the two forms of Scepticism in their ethical teaching was in their method. Both taught well-being as an ultimate aim. With both, however, well-being, although the best thing in life, was not possible without some criterion of conduct. Pyrrho proposed the existing laws and customs as a criterion, and Arcesilaus, the reason.

The word *katorthoma* was used by the Greeks to designate a perfect duty, an absolutely right action, while the word *kathêkon* was applied to an ordinary duty. An ordinary plausible motive may be sufficient for the simple duty, but a higher motive is necessary to inspire the perfect action. The technical difference between these two words may have arisen later than the time of Arcesilaus, yet it is noticeable that Arcesilaus uses the higher word.¹²

The task before Arcesilaus was, therefore, to reconcile such concepts as the chief good and the perfect action with his sceptical standpoint regarding the impossibility of knowledge. This was especially necessary in order to refute the

accusation of the Stoics that he was inconsistent in teaching the possibility of a perfect action.¹³ His argument was as follows: Well-being depends on practical life and not on theories of knowledge, or on a criterion of knowledge.¹⁴ It is not true, as the Stoics claim, that conviction that a thing is right must take place before the will acts. There may be no criterion of knowledge, but action is always possible. No firm conviction regarding knowledge is necessary for a decision of the will. (Since this statement is refuted by the Stoics of his time, it must have originated with Arcesilaus.) The impetus that leads to action may arise without any previous assent having been given to a presentation.

The life of Arcesilaus was also consistent with his teachings regarding the practical character of duty. Cleanthes said to Arcesilaus, "Though you say one thing, you do another." From quotations which we find in later writers, it would seem that the ethical theories according to which Arcesilaus lived were positive and practical. He is quoted by Plutarch as saying that if people would study their own lives instead of regarding the lives of others with envy, they would find much to inspire contentment.

Arcesilaus appears to have recognized the existence of good and evil as standards of judgment. In teaching his sceptical theories, he calls particular instances of suspension of judgment, good, and certain other instances of assent, evil.¹⁵ He did not go so far as to say that the idea of good and evil belongs to the nature of things, but he apparently accepted good and evil as possible concepts.

It is noticeable that Arcesilaus does not use the word *pithanon* (probable), so conspicuous in the time of Carneades; but *eulogon*, or that which appeals to the reason. We find the difference between the meaning of *pithanon* and

eulogon given in quotations from Stoical writers, from the standpoint of Stoic definitions.¹⁶ A proposition is *pithanon* when it seems likely, but not necessarily true; it is *eulogon* when there are logical reasons in favor of its being true. *Eulogon* implies thought; *pithanon*, merely a strong impression. This technical meaning of the word *pithanon* was, doubtless, a later development of philosophical reasoning, yet the word must have been used in the time of Arcesilaus, as the Sceptics of that period did not accept the idea of the *pithanon* as a criterion.¹⁷ It is evident that the doctrine of probability of Carneades cannot be attributed to Arcesilaus.

It was in continuation of the dialectic and ethical principles of Socrates that Arcesilaus made the *eulogon*, or that which the reason approves, the criterion in ethical judgment. When arguments on both sides of all questions so balance each other that knowledge is impossible, virtue must consist in doing that which appeals to the reason in the greatest degree, i.e., the *eulogon*. The use of this word is never attributed to Carneades by Sextus Empiricus or by Cicero, but rather the word *pithanon*. The famous doctrine of probability, technically so-called, entered the Academy at the time of Carneades, and those who attribute to Arcesilaus the teaching that *probability* is the best guide in practical life, fail to give full value to the meaning of the word *eulogon*. The use of this word, however, commits Arcesilaus to a somewhat positive system of ethics, though not to a positive theory of knowledge. He does not apply the *eulogon* either to knowledge or to opinion, but only to the course of experience. He leaves the question of both knowledge and opinion entirely out of sight. He taught that in order to attain well-being we must fol-

low our reason, even if conscious of the uncertainty of all knowledge.

The discussions of Arcesilaus were not primarily on ethical subjects. Cicero does not mention a single instance of the kind, and Sextus Empiricus mentions only the one cited.¹⁸ Other authors who write about his teachings never quote him as making ethical values prominent in philosophical arguments.

CHAPTER XII

CONFLICT BETWEEN THE ACADEMY AND THE STOA

Zeno the Stoic (340/36 to 264/3 B.C.) was a much older man than Arcesilaus, and, as has been stated, was a constant critic of his sceptical theories. The new impetus in the Academy towards Scepticism was intensified by the personal element. We have already referred to the rivalry between Arcesilaus and Timon. After Timon came to Athens he kept up a constant attack upon his rival, displaying his brilliant wit both in conversation and in written satires that ceased only on the death of Arcesilaus. The Pyrrhonic rivalry was as nothing, however, compared to the deeper conflict between Zeno and Arcesilaus. This increased and developed into a fundamental antagonism that divided the Academy and the Stoa during the whole period of Academic Scepticism.

Zeno had entered the Academy as a student about the time that Arcesilaus was born. He remained there for a considerable period of years and then left to open his own school in the Stoa Poikilê, probably about 310 B.C., before Arcesilaus began his public life. The attacks of Zeno upon the Academy, and upon Arcesilaus in particular, called for vigorous defense. The counter attacks of Arcesilaus were strengthened by the obvious disadvantages of Zeno, who was in some ways an easy target. His personal appearance was insignificant, his Greek was faulty in accent and expression, and he had no oratorical power. While he was a keen thinker and an able critic, he was slow in response

and heavy in refuting the arguments of his opponents. When Arcesilaus appeared on the scene, Zeno and his friends were confounded. They had no secret source of beautiful language and were ignorant of grace of conduct. They lacked even point of attack, for their enemy did not pretend to assert any truth, but rather claimed to know nothing. In the stupor of his adversaries, and the enthusiasm of his friends, the victory of Arcesilaus was complete, and all Athens was at his feet. His fine physique and beautiful face, the fire of his glance and charm of his voice hypnotized his hearers.¹ Although the controversy between the two schools thus begun continued for nearly a century and a half, it was most heated in the time of Arcesilaus and Carneades, for the evident reason that during the presidency of these two able men the provocation was greater.

The stimulus provided by the discussions between the Stoa and the Academy was partly the cause of the logical presentation of Academic Scepticism by Arcesilaus. We may certainly conclude that the attitude of Zeno toward Academic Scepticism was one of the important influences that shaped the development of his theories.

The principal points in the Stoical teachings that were attacked by the Academy were their theory of knowledge, their dependence on the method of dialectic, and belief in the power of the reason to find truth, their monistic and materialistic world theory, and their confidence in the absolute value of virtue and justice, independent of outward circumstances. The Stoics believed that nature prepares the way for knowledge according to its own laws. These laws were monistic and materialistic in character. The Stoics taught that sensation was the original stimulus to all thought and knowledge. Their dialectic basis was the *Organon* of

Aristotle, and on this basis they carried out their ideas and constructed a theory of knowledge wholly opposed to the teachings of the Academy. The Stoics attributed a quasi-material character to the soul. They taught that it is corporeal, and therefore possesses extension and holds the parts of the body together. It is also reason and mind, the reason being its central principle. The reason has its seat in the heart and is nourished by the blood, and was called by the Stoics the *hégemonikon*, or leading principle of action. It is at birth in a state of inaction, i.e., a blank tablet. Then comes a material sensation, or impression on the soul, which causes a primitive perception, or *phantasia*. Instead of questioning the origin and authority of sensation and perception, the Stoics considered both of them trustworthy in a series of graded degrees. The impression of objects and ideas on the soul instructs us, they said, on external and internal activities. Thus arise common concepts, or the ordinary convictions of men.

Ideas have different values. The primitive conception is the *phantasia*, but when the understanding also functions, we have the *phantasia kataléptikê*, or criterion of truth. The *phantasia kataléptikê* is an idea, or perception, that understands its object. In this way may develop a group of true ideas, or élite among ideas, distinguished from a larger group of elementary ideas. The assent of the judgment of the wise man accorded to certain propositions stamps them as true. Zeno illustrated this as follows: Stretching out his fingers, and showing the palm of his hand, "Perception," he said, "is a thing like this." Then, when he had slightly closed his fingers, "Assent is like this." Completely closing his hand, he held forth his fist and said, "This is comprehension."² From this simile he gave complete assent a name which it had not before borne, calling

it comprehension, or *katalêpsis*. The *phantasia katalêptikê*, which only the wise man possesses, is the true idea or the idea that comprehends, i.e., the criterion of truth.³ *Katalêptikon* means the object truly comprehended. If we ask how true ideas may be distinguished from false ones, the answer is that a true idea is one that represents reality. Reality, according to the Stoics, is not that which lies behind phenomena, but that which includes them. And how may we know that the object of the idea is real? This is known by a sign belonging to true ideas, which consists in the strength, intensity and compelling force with which they impress themselves upon the mind. The judgment tests the idea, and, if it is a true one, gives assent to it.

The wise man was distinguished from ordinary people as one having a quick understanding of reality. He knows which perceptions are most important. He possesses the *phantasia katalêptikê*, or insight, which immediately recognizes the truth. All men have common concepts, or elementary ideas, according to the Stoics, but only the wise man has the power to know the truth with absolute conviction.

In later years the Stoics compared various historical characters, and attempted to make a list of those who were wise men. This proved an extremely difficult task, and in the end no list was made. Each candidate for this honor possessed certain characteristics which prevented him from being accepted without reserve as a wise man. The wise man was distinguished from the ignorant by the character of the ideas to which he gave assent. Understanding as a function was common to the wise man and to the ignorant, but the ignorant could not distinguish true ideas from false ones.

The theory of knowledge of the Stoics combined with their ethical teachings was capable of producing men and women of sterling character. Their dogmatism impressed

the multitude. The ideal of the Wise Man inspired the youth of successive generations to strive for knowledge and virtue. It was not difficult, however, for a critical thinker, like Arcesilaus, to point out the many illogical statements contained in their theories. He not only attacked the theory of knowledge of the Stoics, but also their teachings in ethics, physics, and theology.

Arcesilaus rejected the possibility of *katalêpsis* as a criterion of truth. His arguments are far-reaching and conclusive.

It is difficult to determine the exact limit of the thought of Arcesilaus in the controversy between the Academy and the Stoa, as quotations from many of the leading thinkers of the Academy are often grouped together by later writers. We cannot, therefore, be absolutely sure that some of the arguments attributed to him were not the outcome of subsequent discussions. Sextus Empiricus, however, gives a detailed statement of the position of Arcesilaus in regard to the *phantasia katalêptikê*.⁴ There is a passage in Cicero where the same ideas are ascribed to Arcesilaus as in the quotation from Sextus. Therefore, we may be reasonably sure that here we have his real standpoint.⁵

The wise man, according to the Stoics, is the one who possesses truth; according to Arcesilaus, on the contrary, he is the one who realizes his ignorance. Arcesilaus claimed that nothing can be truly perceived, or understood, or known. Therefore the wise man of the Sceptics, instead of possessing absolute knowledge, possesses no knowledge, or rather the highest knowledge, in that he knows that he knows nothing.

Zeno maintained that the wise man would never form mere opinions, as he would recognize the truth immediately. The *phantasia katalêptikê* may always be trusted as such,

because it arises through a perception of something which really exists objectively. Arcesilaus replied that the wise man would understand that the perception which apparently bears the impress of truth might be derived from something which after all does not really exist. He would accordingly suspend his judgment in regard to the character of reality. As we have no criterion by which to test the decisions of the judgment in regard to the testimony of the senses, we must suspend the judgment concerning what is truth.

Perhaps Arcesilaus began the discussion regarding the sign with the Stoa, which was so prominent in later controversies.⁶ There is no absolute proof of this, as Sextus Empiricus, in both instances when he quotes Arcesilaus on the *phantasia katalêptikê*, says nothing about the sign. The Stoics of later times claimed that the sign of true ideas is not a common sign that might belong to all ideas, but a particular sign that especially points out the idea that represents the truth. We know that Zeno wrote a book entitled *About the Sign* and, according to Augustine, Zeno regarded the sign as the later Stoics did.⁷

Arcesilaus emphasized his sceptical teachings by the brilliancy of his oratory, and by his power of argument, to the extent that he was said to have risen up to overturn the existing system of philosophy in the Academy. He maintained his ground against the Stoics, attacking the positive theory of knowledge of Zeno at every possible point.

In connection with the strife between the Academy and the Stoa, it is interesting to note the strong friendship that existed between Arcesilaus and Chrysippus (who was at one time a fellow student of Arcesilaus and Lacydes in the Academy) and also with Cleanthes. Some one once said to Cleanthes that Arcesilaus did not do what he ought. "Desist," he replied, "and do not blame him, for if he destroys duty, as far as his words go, at all events, he establishes it by his actions."⁸

CHAPTER XIII

WAS ARCESILAUS A SCEPTIC?

There are two distinct phases in the Scepticism of Arcesilaus. One of these had already existed increasingly in the Academy from the time of Plato, in conjunction with the sceptical influence of the age. The other was definitely elaborated by Arcesilaus himself on a dialectic basis in order to better combat the influence of the Stoics.

It is interesting in connection with the subject of the Scepticism of Arcesilaus to consider the opinions of some of his critics.

Ariston, whom Timon calls "The Sweetly Speaking," says of Arcesilaus that Plato came first with him and Pyrrho last, and Diodorus, in the middle. Timon says that Arcesilaus, carrying on one side the heavy load of Menedemus placed beneath his breast, will run to stout Pyrrho or to Diodorus. He quotes him as saying, "I'll swim to Pyrrho, or that crooked Sophist Diodorus."¹

Diodorus Cronus was an able and sharp dialectician, and a student of Apollonius of Cyrene. It is said that his surname was given him by Ptolemy I, in whose time he lived. On one occasion, when he and Stilpo were dining with the king, Stilpo asked Diodorus a question which he could not answer, whereupon the king said to him sarcastically, "You should really be called Cronus," which was the name of his master Apollonius. In his works, Diodorus maintained the impossibility of motion and change, and offered proofs that that which is undying only can exist.²

Menedemus was the founder of the Eretrian School of Philosophy, a school so named because a branch of the new Megarian School was established by him in Eretria where he lived. He studied under Phaedo and Stilpo. He died about 278 B.C.³

According to Timon, Arcesilaus was much influenced by Pyrrho, yet he did not adopt the attitude of mind advocated by the latter as giving man freedom. Arcesilaus was thought by many to have been a Pyrrhonist, except in name, and was accused by some of remaining in the Academy only on account of his devoted friend, Crantor.⁴ Sextus Empiricus characterized the school of Arcesilaus as being almost one with Pyrrhonism, but not identical. He calls attention to the decided ethical teachings of Arcesilaus, and his reverence for Plato, as well as the prominence which he gave to the ideas of the latter in teaching them to pupils who were gifted enough to receive them. Sextus thinks that his apparent Pyrrhonism was a mask of dialectic, concealing devotion to Plato. He says of Arcesilaus:

“If we are to believe the things that are said about him, he appeared at first sight to be a Pyrrhonist, but he was in truth a Dogmatist, for he used to test his companions by the method of doubt, to see whether they were gifted enough to take in Plato’s dogmas; so that while he appears to be a Sceptic, at the same time he communicated the doctrines of Plato to those of his companions who were gifted. Nevertheless, Arcesilaus seems to me to have very much in common with Pyrrhonic teachings, and his school and ours are almost one.”⁵

Diogenes tells us that Arcesilaus is said to have had a high opinion of Pyrrho.⁶ As men they were very unlike. We know, for instance, that Pyrrho hated the inveterate habit of discussion. Yet however strong Pyrrho’s influence may

have been, it certainly did not lessen the pleasure Arcesilaus took in the use of words.

Numenius, the Neo-Pythagorean, maintains that the Platonism of Arcesilaus was assumed, and that he was really a Pyrrhonist, remaining in the Academy for personal reasons of various kinds. Numenius states the theories of Arcesilaus in almost the same terms as those we find in Sextus' characterization of Pyrrhonism.⁷

We cannot wholly overlook the opinions of the opponents of Arcesilaus that he was not sincere in his Scepticism. As a result of his oratorical gifts, in the heat of the conflict which lasted throughout his public career, he may have sometimes assumed an attitude of mind that was not the serious expression of his belief.

In the first phase of his Scepticism, Arcesilaus evidently had not systematized his theories. Suspension of judgment was the basis of his teaching. He probably did not discriminate between the final result of Pyrrho's teaching, namely, that the truth has not yet been found, and the more dogmatic statement that a criterion of truth cannot be found, which appeared later in his own teachings. He was, therefore, in the first phase of his Scepticism practically a Pyrrhonist.

The influences that produced the second phase of his philosophic teaching were the attacks upon the Academy, especially those made by Zeno the Stoic. Arcesilaus had passed through various stages of development. He studied under Theophrastus, was a friend of Crantor, and a pupil of Polemo, yet apparently was always greatly attracted by the teachings of Pyrrho. Upon the broad foundation of his studies in these different directions, he developed his philosophical theories. When he became president of

the Academy he was a mature thinker, comparatively fixed in his ideas. The necessity of meeting the sharp attacks of Zeno and others upon his teachings developed in him to a higher degree the critical faculty so evident in his later Scepticism. We have, therefore, in his theories a logical sequence of arguments not found in Pyrrhonism, but based altogether on the reason.

Cicero, as influenced by Philo and Antiochus, suggested that the motive of the Sceptics in the Academy was to discover the truth, and he hints at esoteric mysteries known only to the initiated.⁸ Cicero concedes that Arcesilaus was the first to introduce *epochê* into its teachings, and that he taught his sceptical theories with great eloquence. St. Augustine had an interesting theory regarding him; although possibly influenced by Cicero, it was apparently an altogether personal conjecture.⁹ It was that when Arcesilaus saw Stoicism rapidly gaining ground, and the crowd disposed to believe that the soul is mortal, and that all things, even God, are material, he was discouraged about leading people back to the truth, and the best that he could do was to disabuse them of their false ideas. Therefore, he tried to break down the materialistic influence of the Stoics, believing that the doctrines of the Academy were like a treasure which in better times would be found by posterity.

Among other writers, Brochard considers Cicero's testimony the most reliable. Arcesilaus had a high and noble spirit, but seeing the difficulty of finding truth, among so many different systems, found in *epochê* the most suitable course for the honor and dignity of the wise man.¹⁰ Zeller thinks that Arcesilaus was not a follower of Plato, but arrived at the same result as Pyrrho. He adds that such a theory seems incredible, yet considers that Arcesilaus in his

ethical teachings revealed the fine moral spirit of the Academy with which his life was consistent.¹¹

Those who claimed that Arcesilaus was not a real Sceptic could logically base their claim on the following grounds:

- I. He made a direct statement that no trustworthy criterion of knowledge exists.
- II. He called suspension of judgment the highest good; and assent to opinion, the greatest evil.
- III. He taught a comparatively positive system of ethics based on what is reasonable.

In answering the question so often asked, however, in regard to Arcesilaus, "Was he a Sceptic, or a follower of Plato?" the reply should be that he was a follower of Socrates. The Scepticism which he upheld was, in his judgment, the teaching of this great master. The fact that all things were obscure had brought Socrates to a confession of ignorance. Even earlier there had been Empedocles, Anaxagoras, and Democritus, who denied that reality in phenomena could be found. Arcesilaus went perhaps a step farther, and denied that even that one item of knowledge which Socrates had accepted, i.e., that he knew nothing, could be positively known. Equally important reasons may be found for both sides of a question, said Arcesilaus; therefore, judgment must be suspended.

The Socratic dialectic was the law of the development of the Academy. Socrates, apparently a Sophist at the beginning, introduced the critical method of deducing dogmatic results. This was the method at which Arcesilaus aimed, and, although his result was less dogmatic than that of Socrates, he may have been unconscious of that fact.

In this connection it is interesting to note that Arcesilaus

rejected some of the dialogues of Plato, and accepted others, and the test which he used in making this choice was what he considered Socratic. He accepted those dialogues that consisted of discussions that did not reach any definitely stated results, and he rejected those that offered fixed solutions. If Arcesilaus had the intention of changing the attitude of the Academy, it was a change towards Socrates that he desired. He chose, therefore, what seemed to him the best from Plato, from Pyrrho, from Diodorus, and from Menedemus, and outlined his sceptical theories on the basis of what he considered Socratic.

The statements of the critics of Arcesilaus do not prove that he was not a Sceptic. He said frequently that no criterion of knowledge exists. Such a statement was important in his presentation of Scepticism, and modified its positive elements, for he recommended suspension of judgment even in regard to his own conclusions. As for the teachings in his ethical system that seem positive, he introduces the discussion of them by recommending suspension of judgment in regard to everything. He makes it clear that the criterion which he proposes for the demands of practical life does not refer either to knowledge or opinion. None of the Sceptics denied the existence of life or the reality of experience. They were sceptical regarding theories of life and theories of experience.

The originality of Arcesilaus was shown in his critical power of thought. He created a new theory of the relation of knowledge to experience on a logical basis and opened the way in a remarkable manner for philosophic and scientific research. The relative character of all criteria of knowledge is the strongest lesson in his teaching. This we deduce from the application of his theories of knowledge to ethical

teachings. He does not offer any final criterion in ethics, but bases ethical judgments on the same critical foundation as that of knowledge. Both are relative to the needs of experience. As he says that the ultimate theories of existence cannot be known, both in science and morals the reason may be used for the purposes of practical life. He furnished research its strongest weapon, and led the way to the idea of unlimited change and growth in the conditions which determine knowledge.

The service of Arcesilaus to the Academy was distinctive, furthermore, through his power of oratory, use of language, and his originality of expression. It would seem that those who have attempted an analysis of the standpoint of Arcesilaus have neglected the consideration from a psychological point of view of his character of mind. The power of his brain was such that he could use language with remarkable fluency; he could also command his memory, and, by his association of ideas, produce brilliant repartee and oratory.

Arcesilaus' influence was that of a teacher and a speaker.¹² The fact that he did not write proves that his great motive was pedagogical. The real scientist, and the man with an original message for the world usually dreams of reaching the ear of the coming generation. Arcesilaus' method was, however, distinctly Socratic in this respect, and he sought the kind of personal influence which presupposes mature scholars as listeners, such as we know remained in the schools. Consequently he had the opportunity that he evidently desired of controlling the thought of his own time. The method of Arcesilaus was not identical with the sophistical use of words in some of the other schools, which was simply education in the use of dialectic. In the Academy there was always a seeking for truth, and this was primarily

the purpose of all discussions. This aim was, evidently, the motive force in the mind of Arcesilaus, even in the period of most heated controversy with the Stoics.¹³

The teachings of Arcesilaus marked the climax of Academic Scepticism. Both a thinker and a teacher, he holds an important place in the historical development of the Academy. He was one of those who contributed to the possibility of the power of thought and largeness of view that characterized Academic philosophy throughout its entire history.

PART IV

SCEPTICISM IN THE ACADEMY
SECOND PERIOD

CHAPTER XIV

THE ACADEMY AND CARNEADES

Although about a century elapsed between them, Carneades was the real successor of Arcesilaus as a leader in Academic thought. During this time there was no permanent change in the philosophic standpoint of the Academy, although there was, without doubt, a certain amount of progress intellectually and ethically and a very slight increase in dogmatism.

History of the Academy from Arcesilaus to Carneades

The history of the Academy in this period was, briefly, as follows: Arcesilaus was succeeded by Lacydes of Cyrene, who became president about 240 B.C. and held the position until 215/14 B.C.¹ He was the son of a certain Alexander, apparently a poor man, but he succeeded in getting enough money together to go to Athens to study. There he was, at first, one of many who were attracted from all the countries bordering on the Eastern Mediterranean by the fame of Arcesilaus' eloquence. Later, however, he became one of the few who accepted in full his Scepticism. He was even more severe than his master in condemning the holding of opinions by the wise man, and is said to have gone as far as to encourage loss of memory, on the ground that remembering involves the holding of opinions. He seems to have differed from Arcesilaus in his teaching regarding the cri-

terion of the perfect action, but in what respect is uncertain. We know that under him the attitude of the Academy toward the Stoa changed to a friendly one, which grew increasingly so until the time of Carneades.

Lacydes was a man of gravity in character and demeanor, but pleasing and social in his manner. The Pergamon king, Attalus I, was among his admirers, and invited him to Pergamus, but he declined the invitation, saying that statues ought to be seen from a distance. Attalus presented him with a garden which was said to have been in the Academy grounds, but which probably adjoined the original gardens belonging to the school.² This garden was planned by Attalus himself and was called the Lacydeum. There Lacydes gave his lectures.

We know from Suidas that he wrote two books, *Philosophia* and *About Nature*.³ Lacydes was probably the first to give the doctrines of Arcesilaus to the world in written form, and apparently for that reason was called by some of his contemporaries the founder of the New Academy. Lacydes was a man who loved study. He did not, evidently, modify the teachings of Arcesilaus in any respect. A certain Aristippus from Cyrene, an Academician, and also a student of Lacydes, was one of the most distinguished men in the New Academy, and published a book on the *Origin or Nature of Things*. A treatise on the opinions of Arcesilaus was also published by a man named Pythodorus, who was in the Academy at the same time as Lacydes.

The absurd stories told by some in regard to Lacydes and his servants were probably part of an old comedy, written at the expense of the Academy, although they sometimes seem to be taken seriously in unexpected quarters.⁴

Lacydes voluntarily resigned his position as president of the Academy, and was followed by Telecles and Evander of Phocis, who carried on the school together for a time. (Telecles died 168/7 B.C.)

The death of Telecles left Evander at the head, who was followed by Hegesinus (Hegesilaus), from Pergamum, the immediate predecessor of Carneades. During this period of about fifty years, following the resignation of Lacydes, the Academy continued to grow and to hold its position of leadership.

The reputation of the Academy during the period following Arcesilaus attracted students, not only from Athens and other parts of Greece, but from the leading cities in the Greek colonies in Asia and Africa, and from Ephesus, Cyrene, and Carthage, from Alexandria, Byzantium, and Chalcidon, Mitylene, and other cities in the Greek islands. The number of scholars from all countries increased, and even included at one time a man from Alexandria who was himself at the head of a flourishing school in his own city.⁵ The two important changes that were most noticeable after the time of Arcesilaus were seemingly for the better, although they were neither in the line of the leadership of Arcesilaus or of his distinguished follower, Carneades. These changes were a gradually developing friendship with the Stoa, and the placing of the emphasis in academic activities on authorship, instead of dialectic skill in discussion. The teaching of suspension of judgment regarding knowledge continued, but the strife with the Stoa ceased until it was renewed by Carneades. Hegesinus (or Hegesilaus, as he is sometimes called), of Pergamum, was the nominal teacher of Carneades.

The two greatest leaders of the Academy after Plato, Arcesilaus and Carneades, were similar in respect to their

power of oratory and their disregard of the influence of authorship as a qualification for the presidency of a great school. They agreed also regarding the significance of doubt, and on the subject of the perfect action as a moral aim. Apparently, however, they had few other points of resemblance, and, in fact, they stand before us as decidedly contrasting personalities. Carneades was the more brilliant of the two, and holds a unique place in the development of scientific thought, although Pyrrho, Arcesilaus, and Carneades were, each in his own time, characters which commanded attention.

Carneades maintained the same attitude as that of Arcesilaus toward the possibility of knowledge, and he dealt as destructive blows to the arguments of the Stoics as did his predecessor. At the same time, however, he subtly led his hearers through various phases of reasoning and changing shades of meaning until the doctrine of probability emerged. This was accomplished without any transformation of the standpoint of the Academy that was immediately apparent. In his hands the teaching of the New Academy was moulded into a logical system worthy of careful attention.

Life of Carneades

Carneades was born in Cyrene, 214/3 B.C., and died 129/8 B.C., having lived to the age of 85-90 years. He was the son of Epicomus, or Philocomus, and was, according to some authorities, born on the same day of the year as Plato, the day of the Carnean festival consecrated to Apollo. We know very little of his life, and cannot trace his philosophic development with the same certitude as we can that of Arcesilaus. Although he was a pupil of Hegesinus, who preceded him as

the head of the Academy, he is usually spoken of as the follower of Arcesilaus.⁶ He is said to have "perfected" the doctrine of Arcesilaus, a statement which shows that he did not build on a wholly original basis in constructing his epistemological theories. Carneades studied dialectic with Diogenes of Babylon, who was president of the Stoic School, until some years after he himself became the head of the Academy.⁷ He is said to have paid a mina to Diogenes for his instruction.

In arguing against the Stoics, Carneades used to say, "I have learned dialectic from you, and if I reason wrongly, whose fault is it but yours?" On one occasion, he said sarcastically to his opponent, "If I have reasoned well, I have gained my cause, but if I have reasoned badly, Diogenes may pay me back my mina."⁸

Apparently his philosophic education was gained partly through his diligence in examining the literature of all the schools. Hard-working as few others had been, he mastered the theories of his contemporaries in the Stoic, Peripatetic, and Epicurean schools, and studied long and carefully the teachings of the old philosophers. He concentrated on the books of the Stoics, especially those of Chrysippus, so that he is reported to have said, ironically, "If Chrysippus had not lived, I should never have existed." This was a parody on a saying of the Stoics, "If Chrysippus had not lived, the Stoic School would not have existed."⁹

Carneades became president of the Academy about 164/60 B.C., and threw himself into his work with such ardor that he gave very little attention to other things. He lacked the personal elegance of his predecessor, Arcesilaus, and could not spare the time to accept invitations to dinner. It is said

that he was sometimes so absent-minded when eating, that his hands had to be guided for him.

The richness of ideas and the eloquence which are spoken of as having characterized Arcesilaus, were found in a still greater degree in Carneades. In speaking he had the power of winning the hearts of his hearers, and he was so eminent an orator that the other philosophers would often leave their own schools to come to listen to him. In argument, he always conquered even those who were well prepared to oppose him, by both his subtlety and his force. He was considered a great man, not only by posterity, but even by his contemporaries.¹⁰ He differed from Arcesilaus especially in enjoying discussions on ethical subjects. In addition to his other gifts, he had the advantage of possessing a fine voice.

When he was young, he had not learned to control his voice well, and on one occasion, before the day of his great fame, he was disputing in the gymnasium, and the superintendent sent word to him not to scream so loud. "Give me then a measure for my voice," Carneades replied. "You have it," said the superintendent, "in your audience."¹¹ If there was ever need of superhuman persuasion, Carneades would swell violently like a strong current, and inundate everything, right and left, with the tumult of his voice.

With the data available, we cannot decide to what influence he chiefly owed his power. Was it to his voice, or his personal magnetism, his control of language, or his clearness of thought? It was probably through all of these gifts that he enchained the hearts of his hearers and brought them to his feet. His oratory, even long after his death, was considered the most wonderful of his age. Cicero says that he had a vivacity of spirit that was unbelievable, and a precision of attack that had never been equalled by any other

orator. He never lost an argument, and he never failed to demolish a doctrine that he attacked.

The method of discussion in the Academy, since the time of Arcesilaus, had been the use of "the principle of equal value of all arguments," which resulted, in many instances, in the suspension of judgment advocated by the school. This was not always so, however, for hearing both sides of a question sometimes resulted in proving the fallacy of one, as in the celebrated speech of Carneades at Rome, to which reference will be made later. Through long practice in the use of this method of arguing, Carneades acquired the power of presenting a subject in so many different ways, that even his own pupils were often in doubt about his personal opinion. His enemies said of him, therefore, that he led an army of sophistical arguments. His natural gift of humor was an important element in his success as an orator, for he was wont to turn the best causes into a joke, through mere wantonness of wit. We have some illustrations of this.¹²

In attacking the anthropomorphic ideas of his time, regarding the gods, he said, "O yea! the gods talk Greek, I suppose." He made the following pun on Chrysippus — The statue of Chrysippus, which stood in the Ceramicus was nearly hidden by an equestrian statue near it, which prompted Carneades to call it the statue of Krypsippos, or "Horsehidden."¹³

Carneades is represented as an upright man, and there is no reason to doubt this statement. It is said that when he died the sun was darkened and the moon eclipsed. This interpretation of the cause of the eclipse that probably took place about the time of his death is strong testimony of the regard in which he was held.¹⁴

A characteristic expression of Carneades is found in one of Clitomachus' books, which he sent to some of his fellow citizens, to comfort them during their imprisonment, after the destruction of Carthage. Carneades said, "It is probable that a wise man would grieve at the state of subjection of his country."

We have a beautiful saying of his which is surely the utterance of a good man. Freely translated, it is as follows: "Censers, after they are emptied, do not long hold their sweet perfume, but good actions always leave a pure and fragrant memory in the mind of a wise man. Joy is watered by this memory, and thrives, regardless of those who wail over life, and slander this life as a sphere of ills or a place of exile for souls." ¹⁵

The accusation that when he was an old man he was afraid to end his life by suicide, as the Stoic Antipater from Tarsus had done, is not reasonable, as suicide was not the custom in the Academy. The attitude of Carneades toward death, is probably correctly represented by Diogenes Laertius, who reports him to have said, "Nature, which has put this frame together, will also dissolve it." ¹⁶

Condition of the Schools in Athens

In Carneades' time the three rival schools in Athens, the Stoa, the Lyceum, and the Garden, were all represented by men of mark, and were in flourishing condition.

The school of the Stoics owed its importance largely to Chrysippus, one of its early founders. Before he became its president, he studied under both Arcesilaus and Lacydes; nevertheless, he joined Zeno in creating a system definite and positive in character. He was succeeded as president of the Stoa by Diogenes of Babylon, the savant under whom Carneades studied dialectic. Diogenes died about 150 B.C. and

was succeeded by Antipater, who was a lifelong opponent of Carneades. His opposition, however, took such a peculiar form that his contention was, in a way, a kind of burlesque. He never gained the courage to answer Carneades openly. Although he went to hear him every day, and constantly took notes, he never uttered even a syllable in reply, either in the schools or in the streets. He wrote and re-wrote, copied and re-copied, sitting in the corners of the gymnasium. He also published many books. These works seemed weak even at the time of their publication, but later they appeared weaker still, for Carneades, against whom they were directed, was considered a very great man by the succeeding age. As Antipater was afraid to reply to Carneades, yet wrote constantly against him, Carneades gave him the nickname of "The Pen-scraper."¹⁷

Antipater was not, however, altogether without a certain influence on the history of the Stoic School. He was one of the teachers of Panaetius, who succeeded him as the head of the school, about 129 B.C., not long after the death of Carneades.

Although Carneades was much older than Panaetius, these two great men were rivals in influence over the following generation. They must have been well known to each other, and perhaps were friends, for Panaetius had divided his time between Rome and Athens for many years before he was elected president of the Stoa, and his election to such a high position testifies to the influence and good reputation which he had in Athens.

Critolaus, from Phaselis, already an old man, was president of the Lyceum when Carneades began to be prominent in Athens.¹⁸ He was followed by Diodorus of Tyre, and these two men, especially Critolaus, were exceptions to the

general order of representatives of the Peripatetic School of later days, as they were earnest scholars and scientific thinkers, and not without influence on the thought of their time.

In the Epicurean School there was vigor enough to produce such men as Apollodorus, the "Garden Tyrant," who wrote the *Life of Epicurus*; Demetrius, from Laconia, and Zeno, from Sidon. Apollodorus was one of the most fruitful authors of that period, as he published more than four hundred books. He may have been the president of the Epicurean School during the early part of the career of Carneades. He was the teacher of Zeno, from Sidon, who was one of Carneades' greatest admirers, although much younger. Apollodorus was called by Cicero the most learned of the Epicureans.¹⁹ These men furnished the best that the Epicurean School of the second century before the Christian era could offer.

There were at this time important schools of philosophy in many cities besides Athens. The school in Rhodes was especially influential, as Rhodes was not under the necessity of frequent wars, such as were binding upon Athens, which was then a republic allied to Rome. Consequently young men in that city were free to spend their time in study. Alexandria also was gaining in philosophic influence, and there were schools in some of the cities of Asia Minor, and one in Babylon. Athens herself, however, was constantly building up a better established university, and all who studied elsewhere visited this city, if possible, in order to gain new inspiration. During the time of Carneades, young men from Rome began to join the crowds who came to sit at the feet of the teachers of the educated world.

CHAPTER XV

CARNEADES IN ROME

We find at the time of Carneades' assumption of leadership in the Academy that recognition of the power of philosophy had taken place in Rome. This led to the growth of Roman philosophic authorship and of the writings which Seneca characterizes as "*Graecis verbis romanis moribus.*" Twenty-five years before the time that we are considering, the Senate had ordered the books attributed to Numa to be burned because they contained philosophy.¹ Twenty years later the Greek masters who attempted to teach in Rome were expelled from the city by a decree of the Senate, which said laconically, "We do not wish anything in Rome that is not Roman." Even in the age of Carneades, philosophy was thought of by many Romans with abhorrence, as a strange and dangerous influence, and the very name awakened a vague suspicion that by its mention the powers of evil would be invoked.

In the year 156/5 B.C., a celebrated embassy from the schools of philosophy went from Athens to Rome. This was an event of great historical importance, because, through its offices, a new and decided influence was felt in Rome. A movement was then aroused which helped to shape the destiny, not only of the imperial city, but also of civilization in general.

The reason for the embassy was as follows: Athens, like all the cities of Greece, had been ruined by the Macedonian Wars and was unable to pay her debts. She finally came to

such a point of distress that she pillaged Oropus, in Boeotia, an allied city. Pausanias tells us that this was not done maliciously, but through necessity. The Athenians were condemned to pay five hundred talents indemnity by the Sicyonians, who were made arbiters. They were quite unable to pay this enormous sum, and consequently resolved to find some means of procuring a reduction of the indemnity. They finally decided to send a deputation to the Roman Senate, and elected for the purpose three of the heads of the schools, evidently the most renowned and influential men in Athens: namely, Critolaus, from the Lyceum; Diogenes, from the Stoa, then an old man; and Carneades, from the Academy, who was at that time at the height of his power. We do not know why the Epicurean school was not represented, but probably the three most eloquent men in the city were chosen.

Diplomacy, in ancient times, as M. Martha so justly remarks, did not rest upon secret machinations, when the one who talked the least gained the most, but, on the contrary, it was the power of eloquence that won the day. The delegation arrived in Rome, but the Senate did not hasten to receive the members. Meanwhile, the strongest leaven of the Greek philosophy of the age was at work in Rome, while the Athenians waited. It was, fortunately, at a moment when the Republic had no great war to carry on. Between the battle of Pydna, in 168 B.C., and the Third Punic War, in 149 B.C., there were almost twenty years of peace. Thus philosophic intercourse with the Athenian strangers served to entertain and instruct the Romans at a time of comparative leisure.

One day when Carneades and Diogenes were standing in the capitol before the Senate House, Aulus Albinus, who was at that time

Praetor, said jestingly to Carneades, taking him for a Stoic, "I do not, Carneades, seem to you to be a Praetor, because I am not wise, nor does this seem to be a city, nor do the inhabitants seem to be citizens for the same reason." Carneades, evidently pleased that others besides himself regarded the Stoic doctrines as absurd, replied, "That is the Stoic doctrine. You should not say that to me, but to the Stoic who stands here." Albinus had been stationed in Athens, as a Roman official, and was somewhat familiar with Greek literature.²

Finally the day came when the Greek visitors in Rome were received by the Senate, which probably convened in the old Senate House. Crowds gathered to listen to them, and the audience was alive with curiosity, owing to the glorious reputation of these distinguished men. Some of the senators probably knew Greek, yet an interpreter was employed. A well known Roman, C. Aquilius by name, begged for the honor of rendering their addresses into Latin, but he must have found it almost impossible to interpret adequately in a language so different from Greek the rounded periods of Carneades.³ These Roman senators had never heard anything beyond their own rude oratory, and were undoubtedly captivated by rhetoric so new and strange.

It was before the Senate that Carneades gave the two orations that have attracted so much notice in history. It was not simply the eloquence and audacity of the orator that made the scene so memorable, but the occasion was one of marked historic interest. Many of the most distinguished Romans of the time must have been present. We can picture the audience as including Cornelius Scipio Aemilianus, the future destroyer of Carthage; his friend Laelius, sometimes called "The Wise"; and Furius Philus, who, like those already mentioned, was much interested in Greek literature and Greek civilization. Scaevola, the learned

jurist, may also have been of the number; and Sulpicius Gallus, who had predicted an eclipse of the moon during his campaign in Macedonia, and was one of the great orators of his time; and, finally, the old hero, the venerable and terrible Cato who was much opposed to Greek philosophy.⁴

It was avowedly the method of Carneades to offer arguments on both sides of a question. "To speak for and against," said Carneades, "is the best way to find the truth." Therefore, according to his method, he spoke one day about justice and natural right, in the abstract, and the next day, about the way the Romans had interpreted these principles. The Romans were very proud of their national justice, considering it the highest that the world had known, but, probably, they had never realized that the Roman idea of justice related to Romans only, and was not absolute justice. Was it in the cause of justice that Scipio Aemilianus destroyed the cities that rivalled Rome; that Furius Philus, Consul, broke, without shame, the treaty concluded with the Numantians; that Galba massacred thirty thousand unarmed Lusitanians; and that Cato demanded, with insistence, the entire destruction of Carthage? It was not justice, but to the interest of the Roman State, and in this attitude of the Roman mind Carneades found his text for the second oration, which was against partial justice. This address made such an impression on his hearers that we find it quoted by a number of writers.

"If there were such a thing as natural right," said Carneades, "men would find that they must accommodate themselves to justice and injustice, as they do to heat and cold, or to sweet and bitter. But go through the world, and you will find that absolute justice does not exist. The opinions, morals, and religions of different nations are relative, and there is no absolute criterion. Here the mur-

derer is a man of honor, there, the thief. The Carthaginians in their barbarous piety put men to death, the Cretans find their glory in brigandage. Laws differ in different countries, and in the same country and city change with the times. That which we call justice is then only an arbitrary invention variable for the protection of the weak, and the support of the State. Let us take Alexander the Great, for example; would he have extended his empire over all Asia if he had regarded justice? And you, yourselves, you Romans, is it because of justice that you have shown that you have become masters of the world, you who were at first the least of all people? Without doubt, you have acted in the interest of your country, but what then is the justice of Rome, according to the estimate of other people? Is it to extend the Roman empire by violence? Men who serve their country overthrow cities, and exterminate nations without regard to the rights of others. All nations that have gained great power have disregarded the principle of justice. You Romans, also, masters of the world, if you were just, would restore to others all that you have taken, and would yourselves return to your huts." ⁵

The Roman Senate was in this way reminded that if Athens had done injustice in pillaging Oropus, the Romans shared in the same sin, in their treatment of other nations.

Cato, on hearing the second address of Carneades, was very angry, and for more than one reason. He did not approve of the method of speaking for and against a position, and he did not like the theory of universal justice. He considered Socrates, the original propounder of the idea of absolute justice, a seditious teacher who had perverted the morals of his age. This vigilant guardian of Roman institutions had noted also with impatience the taste for the new thought awakened by Carneades in the youth of Rome. Plutarch tells us that Cato was afraid that the Romans would be led to give up the glory of arms for the love of knowledge. There was, moreover, a personal side to his feelings. He

scorned these orators, who were not men of action, and who grew old in schools.

"Good for nothing," he said, "but to plead causes in the other world before Minos."

Cato did not expel the ambassadors, as we sometimes read, but he proposed to the Senate that they should make an honorable pretext to send them away.

"Let us finish up this business," he said, "and send them back to dispute with Greeks in their own schools, and leave us to obey our laws and magistrates as before."

The Senate, however, reconsidered the affair of Oropus, and the indemnity was decreased from five hundred to one hundred talents.⁶ Plutarch tells us that the renown of the addresses before the Senate, and others given in private assemblies, filled the city of Rome. The philosophers were admired, especially Carneades, and were followed everywhere by young men who felt that they were inspired by the Divine. Parents who had before disapproved of Greek education were now pleased to have their sons listen to the discourse of such wonderful orators as these. One would think that the doctrines of Critolaus and Diogenes would have been particularly pleasing to the Romans, but Carneades evidently made the greatest impression. We are told that each orator was admired in a different way. The manner of Diogenes was simple and serene; that of Critolaus, fine and elegant; and that of Carneades, fiery and impressive.

The embassy to Rome gave impetus not only to the awakening of a desire on the part of Roman youth to study philosophy, but also to search for the truth and to seek for the real meaning of justice.

CHAPTER XVI

PHILOSOPHY OF CARNEADES

In his philosophy Carneades confined himself to a great extent to three important points. These were:

- I. The Theory of Knowledge.
- II. The Chief Good.
- III. The Existence of the Gods.

Theory of Knowledge.

The theory of knowledge of Carneades marks the culmination of Academic Scepticism. It was in some respects a continuation of that of Arcesilaus and, like his, developed in opposition to the dogmatic teachings in the other schools of philosophy.

Carneades' theory of knowledge is strong and unequivocal. He states in decided terms that a criterion of knowledge is impossible. To quote Sextus Empiricus, "Carneades, opposing the rest of the philosophers in this matter, goes to the length of the absolute denial of the criterion."¹ Doubt has arisen regarding the Scepticism of Carneades, because of his celebrated doctrine of probability. We shall see, however, that the three degrees of probability proposed by him were in relation to experience, or the practical conduct of life, and did not apply to knowledge.

Carneades' polemic, like that of Arcesilaus, was directed mainly against the Stoics, as they were the ones who held the strongest posi-

tive theories of his time. The most decided opponent of Carneades was Antipater from Tarsus, in Asia Minor, who has been referred to as "The Pen-scraper." Like Carneades himself, this man studied under Diogenes from Babylon, who was the head of the Stoic School, at the time of the embassy to Rome.²

Carneades attacked the problem of knowledge on wider grounds than did his predecessor and presented the most critical examination of the subject that occurs in Greek philosophy. He first asked in general terms if knowledge is possible. In reply to that question, he takes up the matter of the criterion. According to Carneades, the perception is what we perceive as true, but we have no criterion that our perceptions give us the truth. They are very complicated, consisting of many elements of which we cannot know the significance. There is first of all the object, then the characteristics which we attribute to it, and then the interpretation which is a part of the perception. Carneades held strongly to the necessity of suspending judgment from the beginning to the end of his teaching.

The statement is often made that both Arcesilaus and Carneades were Dogmatists rather than Sceptics, because they denied that truth can be found. This was not technically true in either case; what they both denied was that a criterion of truth exists in the human mind. When Antipater argued that the man who affirmed that no perception could be tested was making a dogmatic statement, Carneades replied, as Arcesilaus had done, that a man who denied that there was anything which could really be perceived made no exceptions, not even for the statement that no perception could be tested. The Sceptics in the Academy did not deny the concepts of truth and falsehood, but their

Scepticism applied to the power of distinguishing between them.

Carneades makes the following statements:

- I. There are some false perceptions.
- II. These do not give us certain knowledge.
- III. There is no intrinsic difference in perceptions by which it is possible to know which are false.
- IV. There is no true perception to which a false one may be opposed which differs entirely in character.³

Sextus Empiricus and Numenius laid the principal stress upon the fourth of these propositions.⁴ They quoted Carneades as asking if it were not further probable, not only that the mind functions in such a manner that one cannot distinguish between the true and false in themselves, but also that even the difference between them is relative. This, he said, we can never know, for what judgment can be formed of what is true, when what is true is undistinguishable in principle from that which is false? There must, then, follow suspension of judgment, or *epochê*. There is, therefore, no criterion of knowledge in general, either in sense perception, in conjecture, or in the reason.

The conflict with the Stoics during the presidency of Carneades was even more violent than it had been in the time of Arcesilaus. The arguments of Carneades against the *phantasia katalêptikê* as a criterion of knowledge were similar to those of Arcesilaus, but they were presented on a more logical basis. His illustrations reflected the thought of his own time. As for instance the following, in considering perception in dreams: When Ennius dreamed of Homer, he said afterwards that Homer seemed to stand before him in his dream, and in his didactic poem, *Epichar-*

mus, he says, "For I seemed to be dreaming, and laid in the tomb." At the time when such visions appear, Carneades adds, they are as real as the things that we see when we are awake.

Ennius, the poet, was an honored contemporary of Carneades, although much older. He was often called "The Roman Homer."

Among other arguments against the validity of knowledge through the *phantasia kataléptikê*, Carneades uses the illustration of a long series of true and false perceptions that differ less and less from each other in certainty. Chrysippus himself was obliged to confess that the time would finally arrive when a *phantasia kataléptikê*, or true perception, would be opposed by a *phantasia akataléptikê*, or false perception, differing from it in an infinitely small degree.

Carneades illustrates the illusive character of the power of the reason as shown by the difficulty of conducting an argument on minute distinctions. For example, the difference between wealth and poverty, honor and shame, many and few, great and small, long and short. These differences are always relative, and no certain estimate can be made of how much can be taken away from the one to change it to the other. Carneades illustrates this by an imaginary conversation with Chrysippus. Some one asks Chrysippus if there are few or many. He replies, few. Then one is added, and the question is repeated. Before reaching the limit between few and many Chrysippus begs off and asks to rest. "Rest and welcome," says Carneades. "You may even snore, for all that I care, but what good will that do you, for one follows who will waken you from sleep, and question you again. Take the number after the mention of which you were so silent and if I add one to that num-

ber, will there be few or many?" "Why need I say more?" Carneades adds, "For you admit the difficulty, namely, that you cannot fix the last number which can be classed as few, nor the first which amounts to many. Dialectic, then, will not help you against the *Sorites*, inasmuch as it does not teach a man who is using the increasing and diminishing scale which is the first point or the last."

The *Sorites* is the well-known illustration of the difficulty of deciding between the many and the few. The Greek word *soros* means a heap. In the case of grains of corn, the problem is how many grains are necessary to make it a heap.⁵

Again, in a different line, Carneades said that no criterion of truth is possible through the reasoning powers, because all the material used by the reason comes from experience through sense perception. Reason does not begin with anything that is immediately certain; therefore, every proof presupposes other proofs for the validity of its premises, which brings about a *regressus in infinitum*, and leads to no definite result. Dialectic proves only the formal relations of thoughts to each other, and gives no real knowledge, so dialectic cannot be an arbiter of the true and the false.⁶

Carneades said that dialectic resembles a polyp which devours its own members and thus destroys itself. Like Penelope unraveling her web, it at last unravels all the arguments that have been woven together. It is like the moon which never ceases to increase and decrease.

To continue the argument of Carneades, we cannot make the opinion of the wise man the criterion, for there is a time when the wise man is still ignorant. In order to become wise, he must join one or another of the schools of philosophy, or connect himself with some line of scientific teach-

ing, and there is no criterion by which to decide which of these possesses the truth. Neither is a knowledge of the truth intuitive, in the sense that the truth lies before the eyes. That is not the case, for then there would be a general acceptance of the train of reasoning that leads to definite knowledge.

The final result of the theory of knowledge of Carneades was, from one point of view, the same as that of Arcesilaus, i.e., that a criterion of knowledge is impossible. Carneades' critique of the theory of knowledge of the Stoics, however, was more systematic than that of Arcesilaus, and more fully developed. Through his refutation of dialectic, as well as sense perception, as a possible source of knowledge, he subjected the arguments of his opponents to a comprehensive and penetrating criticism.

Theory of Probability

Carneades is remembered with great honor in the field of philosophy and science as being the author of the philosophical theory of successive probabilities. With him we have for the first time in the history of thought a theory of graded probability which applies to the practical conduct of life and to research in knowledge, ethics, and religion. This remarkable epistemological instrument has been the basis of progress in many lines, and has wholly changed our customary method of dealing with fundamental questions of the problems weighing upon the human mind.

There are three degrees of probability defined according to logical relations as: ⁷

- I. The Probable. This is the least degree of probability that belongs to the single idea, that stands alone.

- II. The Probable and Undisputed. This is a higher idea of probability which belongs to that idea that can be united to other ideas, without any contradiction.
- III. The Probable, Undisputed, and Tested. This is the highest state of belief that is reached when a whole system of connected ideas is formed, agreeing logically with each other.

Carneades maintained that the perception which seems probable is accepted as such in practical relation to the art of life. He definitely states that the truth of the perception is not in question. In regard to that, one must suspend judgment. He claims that no phenomenon is of such a character that perception or knowledge will follow it, but phenomena are followed by perceptions that seem probable, for on this the whole system of life depends. Those things are probable which present no obstacle to our belief. The *pithanon*, or the probable, then, stands for reality in our relation to life.⁸ It does not, however, stand for knowledge. Carneades admitted that the possibility of error should not prevent us from yielding practical assent to perceptions that seem probable, for it is through them that we largely regulate our judgments and our actions, and meet the problems of daily life.

Carneades was one of the first to emphasize the importance of association of ideas in forming degrees of probability in perception.⁹ It is not in resemblance of sensations to objects that we can find a criterion of truth, as it is impossible to verify it; neither is it in the power of the impression on the senses, for that we cannot measure. We can only consider the combination and the order of the sensations that produce perception. It is also less the actual sensations than the asso-

ciations in the mind collected from past experience that constitute the basis of our probable knowledge. Perception includes a group of associated ideas. Any one sensation may be used in many different groups of ideas, and errors may take place in results that seem probable more in the use made of sensations by arranging them in the wrong group than in the perceptions themselves, as Aristotle had pointed out.

Our representations are not isolated; they are interlaced with each other and form chains of association. On the character of the association depends the degree of probability of the perception.

For example, if I see a man, I perceive his face and his form at the same time, and note his complexion, his clothes, his motions, his manner of speech. I see also the things that surround him, namely, his friends, the air, the light, the earth, the heavens. Again, if I think that I see Socrates it must be because the circumstances are the customary ones, his face, his form and his mantle. The physician uses the same principles in his diagnosis, which depends on the harmony of the symptoms accompanying the disease.¹⁰

If some of the conditions of probability are wanting, then assent is doubtful.

Carneades, giving another example, said that Menelaus, having left upon his ship the phantom Helen which he had brought from Troy, could not believe his eyes when he found the true Helen in the island of Pharos.

If, on the contrary, all the conditions are fulfilled, practical assent is granted. Therefore, the representation must not only be probable, but must also be uncontradicted by other representations.

The representation that is still more trustworthy, however, than the one that is simply harmonious in all its details is that which is not only consistent, but has also been carefully investigated. He illustrated this as follows:

When the people elect a leader, each candidate is examined to see if he is worthy of the confidence of the people. All the circumstances must be favorable, the time and place of the examination, and the qualifications of the judge. Has the judge good eye-sight? Is he intelligent? The medium through which the judgment is made must be considered. Is the air clear and the distance not too great? That is, every detail must be examined.

In the ordinary circumstances of life, it is manifestly impossible to take all these precautions, and one is then content with the first two degrees of probability. Carneades tells the following story to bring out this point:

A man who is pursued by his enemies approaches a cave. He looks in, receives the impression that it is occupied by the enemy, and accepting this as probable, does not stop to examine the cave, but escapes while he can. The appearance of probability alone suffices for him. Another, however, who has time at his disposal, enters a room imperfectly lighted, sees a coil of rope, and thinking that it is a serpent, runs away. On reflection, however, in order to make his judgment trustworthy, he returns to examine the object. He finds that it is not moving and probably, therefore, is not a serpent; yet, remembering that serpents in a state of lethargy are quiet, he strikes it with his cane to assure himself more completely, and finds that it is a coil of rope. Thus, the representation test, in order to be of practical value must be probably true, contradicted by nothing else, and must have been examined in all its details.¹¹

Carneades' theory of probability was called downright dogmatism by his opponents, and a turning toward dogma-

tism by his friends. It was, however, a theory constructed to connect us, so to speak, with the ordinary circumstances of life. Carneades made a difference between the incomprehensible and the unknown. He said everything is incomprehensible, but things may be known as they seem to be through a relative degree of apparent truth of perception. He thus applied the doctrine of the probable to things as they seem to be, but not to absolute knowledge.

"The method of Carneades was precisely that test of general consistency in the complete world of thought and action at once, which constitutes our present definition of scientific truth. Carneades emphasized the importance of verification — for the under-emphasis of which Lewes justly blamed Aristotle — to the extent of making it establish the final category of probability, i.e., the utmost certainty in human thought. This is another correlative, and a very remarkable anticipation of the present scientific attitude. It is almost impossible to over-estimate these points." Personal communication from Frederick Barry, Professor of History of Science in Columbia University. See also his *The Scientific Habit of Thought*, pp. 51-57.

The Chief Good

According to the Greek tradition, the chief good as taught by Carneades was *eudaimonia*, or well-being.¹² The Latin tradition as found in Cicero differs slightly. In the latter, Carneades considered the chief good to consist in the primitive inducements of nature, or as expressed in Greek, "the first things according to nature."¹³ There is a certain instinct or desire natural to human beings which serves as guide, and which was called *hormé*. The good things according to nature include physical health, acuteness of the senses, and beauty of surroundings. The ethical basis as outlined

by Carneades does not necessarily imply an Epicurean system of morals. He does not speak only of physical advantages, but also of those belonging to the life of thought. He includes honesty and virtue in the list, but in a somewhat different sense than that in which these terms are used by the Stoics. Carneades claimed that there is a kind of natural honesty and virtue without dogmatic pretensions which is often called common sense.¹⁴

Virtue is, according to Carneades, the enjoyment of the highest good pointed out by nature. This idea carried out further provides for indefinite growth on the part of the individual. Carneades said that it is a law of nature found in all living things to seek that which is ultimately most useful for the individual. He says that the power of nature is discerned through a cloud at first, but with the opening faculties of the mind it is recognized more and more as the foundation of progress.

As Carneades taught the idea of probability as a guide to conduct, life is practically the same for the Dogmatist and for the Sceptic. "You sail, you plant, you marry a wife and rear children, just the same as if you were not a Sceptic."¹⁵

We have no proof that Carneades desired to renounce all systems of morals. His critics claim that he taught no positive basis of morality, but that he defended sometimes one opinion and sometimes another, according to the chance of the discussion. It is, on the contrary, in his ethical theories that we find the real Carneades, as was the case with Arcesilaus. His position was one of ethical relativity. He made a sharp distinction between absolute knowledge and the practical demands of life. It would, of course, be inconsistent with his standpoint to be theoretically sure regarding

final ethical principles, but, taking probability as a basis, Carneades' system of ethics was strong, consistent and original. He considered all moral principles relative to the demands of life and custom. This is the scientific view in the modern sense.

Carneades taught that the ground of right is harmony with nature. Good is the result of this harmony, and evil follows its destruction. The Stoics made virtue the chief good. Carneades said that the chief good was to enjoy those things which according to nature would promote the fullest development of life.¹⁶ The things which are according to nature are to be understood in a large sense as including all that well-being implies, and not as the momentary apparent good of the individual. The criticism has been made that Carneades considered individual good or utility a justifiable motive for all actions. On the contrary, his view of utility was a broad one that included all that could promote the development of society.¹⁷

The art of living he called practical wisdom; the natural incentive to practical wisdom, the chief good. The origin of the chief good when traced back is expressed in the primitive instincts of nature. Every animal loves itself, and as soon as it is born labors to preserve itself; that is, to live in accordance with its nature. At the beginning, it has an undeveloped organism and does not understand its own powers. Gradually, however, it begins to comprehend itself and its own peculiar desires. Therefore, in the case of every animal, what it seeks are those things best suited to it. In every nature is found the possibility of its own development. The chief good of man, said Carneades, is to live according to the nature of man. We are all born for action, of which there are many kinds, but the lesser kinds

are thrown into the shade by those more important. Carneades admired this saying of Plato: "That man is happy who, even in his old age, is permitted to reach his ideal of wisdom and correct judgment."¹⁸ Nature leads man on to the development of germs which exist in himself, until honor in all its stages is attained. Of all the different forms of wisdom, the highest is the active sense of justice. This begins in a narrow circle, gradually extends until it includes fellow countrymen, later, other nations, and, finally, the whole human race.¹⁹ This is in accord with the general sentiment of Carneades' second address in Rome.

Practical wisdom, according to Carneades, would be relative to the ethical development and nature of the individual, and also to nature itself. It is the character of the individual that awakens desire (*hormé*) and fixes its form. The chief good, then, would differ according to the individual. Thus, the principles of right and honor would arise in a natural way from the images of things which men most desire. These images include all those things which the Stoics called indifferent — such as good health, strength, beauty, freedom from pain, and unimpaired senses.

The disposition of mind which gives every one his due, Carneades called justice. He considered justice a human institution, as Pyrrho did, right and wrong. Carneades taught that standards of justice change according to the intellectual development of the nation concerned and depend upon standards of human interests. In its highest form, justice would not allow one nation to conquer another. Carneades said that in his time each nation consulted its own interests exclusively. The most powerful nations, as the Romans, said Carneades, had no idea of justice, or they would give up conquest.

Carneades is reported to have said that honesty, good faith and justice develop from nature as higher principles than temporary personal advantage. He gives as an illustration the story of a man who saw a snake under a place where another man intended to sit down, whose death would be a personal advantage to him. Should he not warn the second man of the danger, no tribunal could possibly convict him or punish him. Yet the natural impulse of all would be to condemn a man who would not tell another about a snake, even at a sacrifice to himself.²⁰

Carneades' most original contribution to the theory of the chief good had to do with the doctrine of freedom. The Stoics taught that virtue is the chief good, but did not believe in freedom. Virtue, Carneades claimed, is impossible without voluntary action of some kind. Chrysippus, in reply to this, said that the freedom that is necessary for a virtuous act consists in a harmonious attitude of the soul towards those events that must take place. This attempt to harmonize high ethical ideals with necessity, we find elsewhere, as in Spinoza and others. All ethical teachers who believe in necessity try to explain how high ethical ideals are possible on such a basis.²¹ Carneades agreed that, according to the stoical theory of necessity, any outside power over the soul would be out of the question.

The Stoics taught that:

- I. All change depends upon an anterior cause. That is, all events are a part of one great chain, and each event depends upon some past event, and is, therefore, determined in advance and could be predicted. Fatalism is the law of the world, and there is no place for freedom.
- II. The universe is one, and each event is a part of the eternal whole.²²

Chrysippus even said that this doctrine, if carried to its legitimate end, would do away with the possibility of virtue and wisdom. Therefore, he posited an imaginary distinction between fatalism and necessity.²³

To escape from the necessity suggested by the atomic philosophy taught by Democritus, Epicurus introduced the theory of the fortuitous concourse of atoms, by which an atom moves without any impulse from without. He denied the universal truth of cause, and explained freedom, together with chance, as uncaused occurrence. With Epicurus, we have a metaphysical conception of freedom found in the uncaused function of the will in man, as in the uncaused deviation of the atoms from their line in falling.

Carneades pointed out what he considered the fallacy of both attempts mentioned to escape from the doctrine of necessity. He said that, if everything happens through fixed anterior causes, it could not be true logically that any event might have been otherwise. Carneades said, moreover, that Epicurus might have defended his case without the imaginary declination of atoms, and that it would have been much wiser to maintain that the action, both of the atom and the soul, was a result of their own inner nature, than to introduce an atomic declination for which no cause could be assigned.²⁴

Carneades' theory of freedom was as follows: All that happens may be true from all eternity, for those things which are future can be recognized as true. It does not follow, however, that all things are closely bound together in a sequence of events, and depend on antecedent causes. Carneades granted that no motion exists without a cause, but it is not necessarily an outer antecedent cause. Further, that we need not seek for an external cause for the voluntary

actions of the mind. Action is in one's own power, otherwise it would not be voluntary. Yet, he did not say that the action which is the result of free will is an effect without a cause, for the nature itself of the human being is the cause of this effect. Carneades declared, therefore, that Apollo himself could not predict any events in the future, because their causes develop in nature. The Stoics, according to Carneades, confounded succession and causality. Carneades said that Hecuba was not the cause of the ruin of Troy by giving birth to Paris; nor Tyndareus the author of Agamemnon's murder because he was Clytemnestra's father. He said the true cause is not that which precedes an event, but is a natural efficacy of action. Future events cannot be known without an acquaintance with the natural causes which will produce them. No one before Carneades had analyzed the concept of cause so profoundly, and distinguished so plainly between causality and succession.

The Stoics commended the search for the highest things according to nature, with certain limitations; although, like Plato, they considered the ordinary good things of life indifferent. Carneades, in his rather biological system of morals in regard to things called indifferent, agreed with Aristotle rather than with the Academy. His ethical theories are a mixture of the elements of the teachings of other schools, with a decidedly original result. Those who call Carneades' doctrine of morals a system without profundity or grandeur overlook its high aim in the kind of well-being for which it strove. The aim was well-being, but it was to be found through the highest development possible to human nature, and was based on principles which should improve as nations progressed. Furthermore, the criterion

in morality was found in the judgment and not in the emotions.

The natural desires which lead to action depend on the third degree of probability. Such principles were found in ideas that agree logically. That is to say, virtue is knowledge. Standards of virtue rise in the moral scale according to the progress in knowledge of the individual and the nation. There is a natural virtue and a natural honesty. One may accuse Carneades of going back to the old teaching of the Academy in saying this, but there is a difference. He does not teach absolute truth, but points out the kind of conduct that is probably the best, without making dogmatic statements. Carneades said that well-being depended on the results following choice and action. Both in his ethics and in his theory of knowledge he taught that truth is a matter of degree; we never have the whole of it. As truth is relative to experience, it would follow that there are different degrees of probable truth.

The Existence of the Gods

When the contemporaries of Carneades founded the proof of the existence of the gods upon the *consensus gentium*, he replied, that, first, one could not know the ideas of all nations (some nations are probably too savage to have any ideas whatever in regard to gods); secondly, even among thinking men, many have denied the existence of the gods. The question is not, moreover, whether there are people who believe that there are gods, but whether or not gods exist.²⁵

Carneades attacked the Stoic conception of the gods by a critical argument against its anthropomorphic character.

This appeared in his discussions for the first time in philosophy, as far as we know, and had a wide influence on subsequent literature. He claimed that Deity cannot be thought of as a living rational creature without attributing to it qualities that are impossible. The concept is anthropomorphic, as the attributes of living reasonable beings are inconsistent with the ideas of eternity and perfection attributed to God.²⁶

He said, "Who can know nature and her resources so thoroughly as to assert that a universe is impossible without gods?" "However that may be," he added, "the gods as presented to our minds are neither eternal nor perfect nor wise. As far as we know life on earth, all its manifestations are perishable, and no living being can be eternal. As, therefore, the gods as presented to us have similar qualities to those of men, they must be mortal, for life as we know it involves changes and dissolution."

Carneades further asserted that the gods as created by the human mind are not only mortal, but imperfect. He said that the ascription of virtue to them presupposed a state of imperfection which caused the need of virtue. Furthermore, he added that the character of the gods, worshipped at different times, by different nations, seemed to depend upon the degree of development of the nations themselves, and uncivilized nations even worshipped the powers of evil.

Carneades' attack upon the gods was directed principally against the pantheism of the Stoics, and the theory that the world was god.²⁷ Cicero says that Carneades had no desire to deny the existence of the gods but only to attack Stoical theories regarding them. He opposed the idea that the stars possess the power of reason, and, therefore, belong to the rank of gods. The sharp mind of Carneades saw

immediately that the doctrine of pantheism was inconsistent with the materialism of the Stoics, and with the doctrine of the final destruction by fire.²⁸ Carneades said, "Whatever may cease to exist, cannot of its own nature be eternal."²⁹ Also, "We have neither theoretical, practical, nor logical proof that the world is god."

Carneades' teachings concerning belief in the gods are usually quoted to explain his attitude toward immortality of the soul. He apparently, however, approached the latter subject from another point of view, more intimately related to that of his general teaching. His ideas regarding immortality rest upon the two most original things in his own philosophy, i.e., the supreme authority of nature, and probability. The combination of these two ways of reasoning, according to Carneades, would not lead to a belief in continuation of the life of the individual. Trust in nature, on the other hand, should remove the fear of death.

We read that when the time came for Carneades himself to face the future, he constantly repeated the same idea, that nature made him, and had kept him together, but that the time would come when nature herself would bring about his dissolution.³⁰

An argument against the material gods of the Stoics appears in many places in quotations from Carneades. This was that "Whatever is born must die, and whatever can come into existence can go out again." It was applied in many different ways — among others, to the idea of immortality. It was used by Panaetius to prove the mortality of the soul, and in just the opposite sense by Posidonius to show that the soul existed from all eternity, and is therefore immortal. We find the same argument used in various ways in the writings of Sextus Empiricus and others. Again, Posidonius uses the arguments quoted from Carneades not as against the existence of the gods, but

in favor of such a doctrine, saying that the arguments given by Carneades concerning the existence of the gods do not prove that the gods do not exist, but that they do not suffer pain.³¹

Many shafts of ridicule were directed against belief in divination by Carneades. He found in it no logical connection of cause and effect and called it either fraud or accident. "The Stoics say that there is nothing which God cannot do." "I wish," said Carneades, "that he had made these Stoic sages a little less inclined to believe every idle and superstitious tale." The Stoics taught that if there were gods who do not inform men of future events, it must be either because they do not love men, or that they do not know what is going to happen. Possibly they think that such knowledge would be harmful, or that it would be inconsistent with their own majesty to reveal the future. Carneades denied that if gods existed they would necessarily be benevolent, nor did he think that the future is necessarily certain.

Carneades calls the instances given in Greek literature of divination of the future false. He grants that they are picturesque, and are adorned by every conceivable beauty of language, sentiment, music and rhythm, but holds that there is no need of inventing such fiction. He said that there were many ways in which apparent predictions could be accounted for.³² While cutting stones in the quarries at Chios, a man once discovered a natural head of Pan in the marble. Carneades remarked, "In every block of marble there are heads worthy of Praxiteles." He said that divination could not affect the objects of sense perception, and also that it was not of much use in art and science. In medicine the conjurer is not called in, but the physician. Diviners could not instruct us in literature or in mathematics.

We do not appeal to them for proof of the truth or falsehood of geometrical problems, neither do we refer to them in morals or dialectic issues. We are at a loss to discover what subject the diviners have specialized in. "Therefore," said Carneades, "it would seem that divination is impossible."

Carneades admitted the possibility of religion, but it was a religion of nature. He said that the beauty of the world and the celestial order compel us to confess that there is an excellent and eternal nature which deserves to be worshipped by all mankind. Therefore, if a religion suited to the nature of mankind is to be taught, superstition must be destroyed.³³ The universe is the work of nature, a nature which by its own motions and changes modifies everything.³⁴ The theory of Carneades was that the universe exists by the power of nature, independently of the gods, and that there is a kind of sympathy which joins together all the parts of the universe. The greater this sympathy is in its own power, the less is it necessary to have recourse to a divine intelligence, according to Carneades.

Carneades spent much of his energy in contending against the Stoical theology and teleology, so that we know more in regard to his metaphysical discussions on those points than about his own ethical and religious theories. His special attacks on the Stoics do not show that he was himself primarily interested in theological subjects. He expressed his opinion because the weaknesses of the presentation of the Stoics on these subjects gave him a good point of attack.

These discussions are dealt with by Sextus Empiricus and by Cicero alike, and were probably taken in substance from one of the books of Clitomachus.

CHAPTER XVII

ESTIMATE OF CARNEADES

Was Carneades a Sceptic? In his attitude toward knowledge he was a Sceptic. He taught that we cannot know the truth about the things we think we perceive. The world to him was a world known only through our perceptions. It is stated decidedly that he opposed the rest of the philosophers in regard to a criterion of truth, and that he went to the length of absolute denial of any such criterion.

The teaching of Carneades reached its highest point in his theory of knowledge, which justifies Cicero's estimate of him, that he was a man of incredible ability. This theory is based on the relativity of knowledge in general. Motives for action depend on association of ideas and degrees of probability.

Clitomachus considered that Carneades had rendered a great service to humanity in making the theory of knowledge in the Academy more definite, and in distinguishing between knowledge of things as they seem to be and knowledge of things as they are.¹ That Carneades tried to remove certain errors that existed in the theory of knowledge in his time, was well illustrated by his lectures in Rome.

In estimating the Scepticism of Carneades' theory of knowledge, it is important to consider the standpoint of some of the writers who speak of him in later times.

Echoes of disagreement even among Carneades' friends in regard to his Scepticism are found in the reports of his

teachings by Metrodorus of Stratonice, and Clitomachus, both of whom studied under him. This disagreement continued in reports of later writers. Metrodorus of Stratonice, who was first an Epicurean before he became a follower of Carneades, was considered to have a good understanding of him. He asserted that Carneades had been generally misunderstood, and claimed that his Scepticism was not real, but was merely a critical attack on the theory of knowledge held by the Stoics. Metrodorus is said, however, to have changed his own standpoint after the death of Carneades, and to have abandoned the proposition which he originally held, that things are absolutely unknowable.²

Clitomachus is quoted as saying that Carneades taught that there is no experience that gives us absolute knowledge, but many which give us probable knowledge of different degrees.³ As years passed, however, he modified this statement somewhat, and once went so far as to say that he could never understand what Carneades really thought.

Sextus Empiricus gives us a clear and concise statement, previously quoted, as to the standpoint of Carneades. He says in decided terms that Carneades never admitted a criterion of absolute knowledge. In regard, however, to the practical demands of choosing a way of life that leads to well-being, Carneades recommended the use of the theory of successive probabilities.⁴

Philo of Larissa, later president of the Academy, who had a motive in proving that Carneades was a dogmatist, said decidedly that his Scepticism was not real, but that he had a positive esoteric philosophy (a method of expression used in the time of the emperors). Numenius said that Carneades was undeceived by his own eloquence and,

further, claimed that the aim of his Scepticism was ambition in his contest with the Stoics, which he secretly confessed to his comrades.

Some of these witnesses intimated that Carneades was enveloped⁵ in a curtain of falsehood, but was truthful within. All these criticisms prove that he paid a dear price for not having recorded his doctrines in plain terms. Had he published books, he might have been counted among the great philosophers, but as he wrote nothing, he left his critics free to picture him in subsequent literature as they desired.

It is not reasonable to suppose that Carneades confused the issues regarding opinion and knowledge, i.e., between conviction and absolute knowledge. The conflict in the Academy with the Stoa had been severe on that very point. Both Arcesilaus and Carneades accused the Stoics of basing their theories on opinion and not on knowledge. Carneades approached the matter of probable conclusions from another angle, that of the relation of perception to reality. He did not accept any perceptions as final, but as guides in experience.

Judging from the fragments of his teaching that remain, Carneades' deepest thought was shown in his analysis and division of concepts into those that refer to knowledge and those necessary in the art of life. We can say with certainty that Carneades did more to promote the cause of critical thought than anyone else since the time of Aristotle. His power must have been amazing to have given him so far-reaching an influence without the aid of publications. There was more that was original and positive in his teachings than in those of Arcesilaus. He was not an idle talker. His method of speaking on both sides of a question was in-

tended to lead to a critical point of view. His earnestness is evident in Diogenes' statement that it was with difficulty that he took time to eat and drink. In fact, the grand characteristic of Carneades' Scepticism is seriousness. His speaking in general inspired his hearers to search for truth. His text was always the truth, in some form or other, even when he stated that it could never be found. In arranging the different degrees of probability, he provided for a method of life that leads to well-being.

Carneades' presentation of a religion of nature was also important. The trust which he showed in nature during his old age of suffering was consistent with his teaching regarding the chief good. Carneades saw deeper than the superstition of his time. He combatted the anthropomorphism which was an essential part of the popular religion, and showed that all religion depends in character on the intellectual progress of a nation. He opposed the Stoical ideas of divination, advocated freedom of the will, and defended liberty of thought and action, as had never before been done.

The doctrine of the New Academy, understood in its historical significance, opened the way for a new epoch in scientific research. The illusion of having found the truth kills progress in thought, while an understanding of the relative value of knowledge opens the way to a search for higher degrees of truth.

The reputation of Carneades was not portrayed as good in the literature after his time. This seems to have been largely due to misunderstanding of his aim. He was supposed to attack ideals in general, which was not true. What he tried to teach was the scientific attitude of mind, on which ideals may be based, and according to which their value

may be estimated. It was also partly due to the fact that the books in which he is most fully quoted were under Roman influence. The Romans had been unfavorably affected by his two addresses before their Senate, because he attacked their ideal of justice. Some Roman writers even said that Carneades was responsible for the beginning of the corruption in Rome. They were not ready to approve of his definition of justice as a higher obligation than national loyalty; indeed, is the world even now ready to accept international justice?

In morals also Carneades was considered by many who have written about his teachings to have been a casuist who avoided the main issue. This was to a certain extent the natural result of his violent attacks upon the Stoics, and of his brilliant oratory which sometimes carried him away as in a flood. He illustrated his lectures with an infinite number of ingenious and delicate comparisons, taken from both history and mythology. The impression of casuistry was intensified by the fact that he advocated very few abstract formulae and seldom made short distinct statements, and possibly by the fact that he was constantly joking. As far as we can judge from the quotations which we have from his addresses, he expressed his opinions with consistency, and did not change them according to his audience. His addresses were always on philosophical subjects and were not directly connected with politics, unless we make a possible exception of those he made at the time of the embassy to Rome.

Carneades was not rich, and lived a simple life. Apparently, he was not ambitious except in the matter of oratory against the Stoics, and in that respect he was rewarded by the glory that orators often enjoy. According

to the testimony of all writers, he was the leader in the philosophy of his time, and there are many who speak of him with praise, among whom may be numbered such men as Quintilian and Lactantius. Even Numenius says that outside of his orations he held the truth in great respect, and that although he was said to talk against justice in public, he regarded it in private. Sextus Empiricus attributes a serious aim to the New Academy. Democritus, who was not a Sceptic, had said that nature had buried truth in the bottom of the sea, but Carneades admitted that there is in nature the basis for a probable truth, necessary for practical purposes. By his methods as President of the Academy he was subjected not only to misunderstanding, but also to misinterpretation, and those who followed him were even more likely to give a wrong impression of him than those who failed to understand him at the time when he spoke. As a result, he is variously understood and variously reported by posterity.

All who have studied Carneades carefully must admit that his influence has been great. The principles which he taught were far-reaching, including freedom of thought and the possibility of unlimited progress in research, for these things would follow from the platform that he announced. With the progress of civilization, relativity of knowledge and of moral standards open the way for higher ideals. The theory that the criterion of probable truth depends on the judgment offers training to the mind, and leads away from a materialistic world theory.

As far as we know, Carneades regarded nature as a whole, and not as the expression or creation of some ultimate power. Although he said that we get our ideas of nature through perception, he did not suggest that the world exists only

in our perceptions. There is no reference to any such idea in his lectures, as we understand them. He taught an objective world which is reported to us through perceptions. He also taught that perceptions give us varying degrees of truth. He did not limit the degrees of probable knowledge which it might be possible to attain.

CHAPTER XVIII

CARNEADES' INFLUENCE ON THE STOICS

An important outcome of the life and work of Carneades is found in the modifications that subsequently took place in the doctrines of the Stoics.¹ There were two factors that worked together to bring these schools of philosophy gradually nearer to each other in a general eclecticism. One was the widespread influence of the Scepticism of Carneades and the other was the closer connection that developed between Greece and Rome. After the conquest of Macedonia by the Romans, 168 B.C., Greece was practically a part of the Roman Empire. The interest in Greek philosophy in Rome which began with the visit of the embassy of the philosophers in 156 B.C. increased as time went on. Scientific intercourse between Athens and Rome was promoted by such men as Flaminius, Aemilius Paulus, Scipio Aemilianus, and many others.² Greek teachers went to Rome and Roman youth went in ever-increasing numbers to the schools of philosophy in Athens and in other cities of the Greek world.

Diogenes, from Babylon, was one of the strongest presidents of the Stoic School, and included among his pupils not only Carneades himself, but Boethus from Sidon, and Panaetius from Rhodes, who were among the first to put the Stoic School on a more eclectic basis. Diogenes was succeeded by Antipater, an unimportant rival of Carneades, who enjoyed a long presidency, during which no doctrinal

change was noticeable in the school; but even in the later years of Diogenes, problems were presented by Boethus and Panaetius which the Stoics could not solve. It was the constant polemic waged by Carneades that caused Diogenes himself, in his later years, to waver regarding some of the Stoic theories, especially about the world conflagration. The two pupils of Diogenes who led in the transformation of Stoic doctrines were Panaetius and Boethus. Boethus differed from Chrysippus in his theory of knowledge and denied that the world and the Deity are the same substance, gave up his belief in a world soul, and finally his belief also in the doctrine of the conflagration of the world. He more nearly represented the deism of Aristotle than the pantheism of the Stoics. Panaetius, however, brought about greater changes. He was cosmopolitan in his habits and ideas. Influenced by prevailing thought in Rhodes and Rome, he spent many years studying under Antipater in Athens, with the opposing eloquence of Carneades ringing in his ears. He was the successor of Antipater, and also the chief founder of Roman Stoicism, and the greatest Stoic after Chrysippus. He was a friend of Laelius, and of the younger Scipio Africanus, in whose house he lived. Panaetius was the teacher of Q. Mucius Scaevola, and probably of L. Aelius Stilo and other Roman Stoics, and a pronounced admirer of Plato and Aristotle. He opposed the idea of the destruction of the world by fire and, like Carneades, doubted the validity of divination, and the existence of the soul after death. The practical side of his teaching is shown in his book *On Duty*, which was the model of Cicero's *De Officiis*.³

The relation of Carneades to subsequent changes in Stoical theories has not been sufficiently investigated. Brochard

rightly refers to Antipater as an important representative of Stoicism among those who lived after Chrysippus, but he did not compare with Panaetius in influence. Panaetius was a moral reformer, as we know through abundant quotations from his works in Cicero's *De Officiis* and elsewhere, and as such held a strong position in the history of the Athenian schools. The dialectic method of the Stoic School did not differ essentially from that of the Academy. The close connection of Chrysippus with the Academy has already been noticed. Even in those early days the Stoics were so much interested in the studies in philosophy carried on by Arcesilaus and Lacydes, that they may have unconsciously adopted from the Academy the habit of arguing for and against a principle. The attacks of Carneades upon the theology of the Stoics led Panaetius to an increasingly sceptical attitude, and the giving up of the doctrine of the origin and destruction of the world by fire was subversive of all Stoic teaching. Philo of Larissa confirms the statement that Panaetius and Boethus had given up this doctrine.

Furthermore, Panaetius maintained that there never has been and never will be a time when the cosmos exists as fire, because if this were the case, the fire must come to an end for want of nourishment. He gave up the idea that judging from the past history of the cosmos there must have been a time when God existed alone, and maintained that the soul cannot live apart from the body, and that everything that is born must die. The soul was born, so must it also die.⁴

The influence of Carneades was felt in all the later history of Stoicism, and we may even claim that the later theological interpretations of Stoical doctrines on an allegorical basis dated from the attacks of Carneades upon their inconsistencies. The allegorical explanation of the popular religion was,

to be sure, an old one. Critias, in one of his books, expressed the belief that the world of the gods was created by the politicians to cause men to fear evil.⁵ Even before that, in the poems of Xenophanes, the gods are called figments of the imagination. There were, however, technical allegorical explanations that were given by the Stoics to refute attacks upon the inconsistencies of the theology of later times, and to these Carneades must have furnished a strong incentive. We have shown that he launched his powers of invective particularly against the astrology of the Stoics, and it is noticeable that Panaetius was the first Stoic to doubt this doctrine. Panaetius and Carneades use similar arguments in criticizing the popular belief in all kinds of divination. They are both represented as asking the sarcastic question whether it was Jupiter who had ordained the crow to croak on the right hand and the raven on the left; and Boethus was at first led to offer a scientific explanation of auguries in consequence of Carneades' attacks.⁶ Naturally, this would be the attitude of all thoughtful Stoics who wished to maintain the reasonableness of their position, for Panaetius' doubts on the subject of divination were regarded by his contemporaries as a sign of degeneration, as this had been made by Chrysippus one of the leading tenets of the faith. The belief of Chrysippus that there is a revelation to mankind through a foreknowledge and foretelling of events usually considered fortuitous, had never been seriously questioned before the time of Carneades. We find, however, that Panaetius, in giving up divination, made an exception in favor of subjective or internal leading, to be explained according to subtle laws of the mind. One of the striking consequences of the influence of Carneades on Panaetius was that the latter accepted the theory of absolute

freedom of the human will, freedom from fate and from the necessity caused by an eternally foreordained chain of events.

The older Stoics taught the unity of the soul as a part of the world soul, but Panaetius shared in the theory of Carneades of a soul expressing the physical nature together with the power of reason. This was in the line of Aristotle's belief that the soul is composed of different principles.⁷

The most famous pupil of Panaetius was Posidonius, who was for many years at the head of a popular school of philosophy in Rhodes, where Panaetius had also taught before going to Athens. Posidonius was important in shaping the later history of Stoicism, and was, as well as Panaetius, much influenced by the teachings of Carneades. He was such a popular speaker that many Romans went to Rhodes to attend his lectures, among others Cicero and Pompey.⁸ Cicero describes Posidonius as a man whom all cultured Romans honored. He was well known in Rome, and during his second visit to that city occupied the position of ambassador.

Posidonius was more learned than Panaetius, but not as critical a thinker. He may be called both a rationalist and a mystic, and was the last great inquirer of the old classical period.⁹ He was more loyal than Panaetius to the Stoic theories, and defended the belief in the conflagration of the world, taught the old Stoic doctrine of divination and believed in the life of the soul after death. He was even stronger than Panaetius in upholding the Aristotelian constitution of the soul, but with certain modifications derived from his own personal experience. He agreed with Panaetius that a double moral system was necessary, an ideal one for the wise man, and a practical system for the common

people. Posidonius was far more interested in the natural sciences than were the Stoics generally. His writings include studies in literature, mathematics, astronomy, geography, meteorology, spelling, morals and history. His influence in geography is strongly shown in Strabo's work. More than twenty books may be rightly attributed to Posidonius.

Speaking in general terms, the influence of Panaetius and Posidonius extended over a period of about a century, as Panaetius was born about 180 B.C. and Posidonius died about 50 B.C. During all those years the old doctrines of the Stoic School were modified according to the demand of the time. As Carneades died in 129/8, his influence was strong during the early part of this period at least, and may be definitely seen in the development of the ethical theories of the later Stoics.

The result of the new points of view was the drawing together of the Academy and the Stoa on the subjects which most affected their teaching in relation to the common people. The reflex influence of this was soon felt in the Academy in its ever increasing tendency towards eclecticism. None of the followers of Carneades, however, reached the high standards of independent thinking shown in their master.

CHAPTER XIX

DECLINE OF ACADEMIC SCEPTICISM

Clitomachus of Carthage, 187/175-110 + B.C.

The only successor of Carneades who served the cause of Scepticism in the Academy was Clitomachus of Carthage, otherwise called Hasdrubel.

Clitomachus did not immediately succeed Carneades, but another Carneades, son of Polymachus, followed first, to whom Carneades had himself surrendered the presidency of the Academy. He died after two years, and then Crates of Tarsus was president until 129/8 B.C.¹

According to some authorities, Clitomachus left his native city, Carthage, at the age of twenty-four, to continue his studies in Athens.² He had already studied philosophy in Carthage, where he had delivered lectures and written several books in his native language. After reaching Athens he spent some time examining the teachings in all the schools of philosophy there. Four years later, he entered the Academy as a student and remained approximately eleven years, during which time he mastered the Greek language and entered into the spirit of the school.

About 140 B.C. he apparently had some small difficulty with his master, Carneades, and left the Academy to establish his own school in the Palladium. Gradually a large body of students assembled there, and Clitomachus carried

on a separate school for some years. While Crates was still President of the Academy, however, he gave up this school and went back to the Academy with all his followers. After the death of Crates in 129/8 B.C., Clitomachus accepted the presidency of the Academy. Men of culture from all parts of the civilized world had rushed to Athens to hear Carneades, and remained to form the nucleus of the audiences of Clitomachus.³ He was not an original thinker, but his importance lies in the fact that he gave the teachings of Carneades to the world. He is said to have written in all more than four hundred books. When Carthage was destroyed, he sent a letter of consolation to his countrymen in that city, in harmony with the saying of Carneades that the wise man would probably regret the state of subjection of his native land. He wrote one book on the sects of philosophy, but his better writings were a series of four books on the subject of *epochê*. Two short books on *Academic Scepticism* were dedicated to distinguished Romans, one to Caius Lucilius, and the other to Lucius Censorinus. Cicero characterizes these as representing fundamental Academic principles. They were written to express the theories of Carneades, combined with some of his own ideas.

The third book of Cicero's *Nature of the Gods*, which criticizes the theology of the Stoics, originated, without doubt, in the work of Clitomachus. The criticism of dogmatic theology and astrology by Sextus Empiricus was also derived from his writings, and possibly the refutation of the Stoical teaching regarding the *phantasia katalêptikê* by the same author. Cicero's book on *Fate* was profusely borrowed from Clitomachus, and so was much of his second book on *Divination*. Clitomachus is usually considered a firm Sceptic, yet we find in some of his writings the beginning of the

eclectic tendency, soon to become so strong in the Academy.⁴ He was the only one of Carneades' followers who nominally held fast to Scepticism. We have every reason to think that as President of the Academy he took a strong stand against the dogmatism of the other schools. In his early life he had carefully investigated the teachings of all of them, and in his polemic against them he was able to go deeper into the subject than his opponents, who were combating the Scepticism of the Academy.⁵

Philosophy was still enjoying the widespread interest given to the subject by Carneades and distinguished followers of Clitomachus, and even others who had listened to Carneades himself, spread his theories in many other lands. The influence of the Academy was strong in many parts of the Greek world, and branches of this leading school were established outside of Athens; as, for instance, one by Callicles in Larissa, one by Zenodorus in Tyre, and one in Alexandria. Catullus in Rome was also a partisan of Carneades. The discussions that followed the extended influence of the Academy resulted in many modifications of the original teachings of Carneades.

Four students of Clitomachus are mentioned by Cicero as especially important: Philo; Charmades, or Charmidas, who is spoken of by Sextus Empiricus as being one of the founders with Philo of the Fourth Academy; Melanthus, a tragedian from Rhodes; and Metrodorus of Stratonice, who thought he understood Carneades the best. Charmades dated back to the time of Carneades and outlived Clitomachus.

Charmades followed the method of Carneades in combating all assertions, and was celebrated for his eloquence and his remarkable memory. He carried on an active polemic

against rhetoricians, and claimed that true eloquence was impossible without a thorough knowledge of all the systems of philosophy. He seems to have belonged to the group that considered the Scepticism of Carneades too strict.⁶ Members of this group claimed in different degrees that the wise man could hold opinions.

The most original student of Carneades was evidently Metrodorus of Stratonice, who has been referred to as saying that, according to Carneades, the wise man could sometimes have opinions. When Philo left Clitomachus he turned to Metrodorus who is said to have influenced him to believe that the Scepticism of the Academicians was not general but only to be used in opposition to the *phantasia katalêptikê* of the Stoics.⁷

Philo of Larissa, Founder of the Fourth Academy

Clitomachus was followed by Philo of Larissa, 147/40 B.C. -79/77 B.C., who became President of the Academy in 110 B.C. He had studied in his native city under Callicles, a student of Carneades, and when he was over twenty years of age he went to Athens, where he entered the Academy and was under Clitomachus for about fourteen years. At the time of the Mithridatic War, probably about 88 B.C., he went with others to Rome, where he was an influential teacher of philosophy.⁸ At this time Cicero was among his hearers. It is not evident whether he remained in Rome or returned to Athens, and the date of his death is also uncertain.

Philo was a distinguished man in his time and had many followers, both because of his character and because of his great learning. He taught both rhetoric and philosophy, and in one of his books he gives a series of illustrations from

medical practice, which testify to the increasing correlation between medicine and philosophy, the results of which were so evident among the later Pyrrhonists.

The authorship of Philo was apparently extensive, although all of his books have been lost. Cicero speaks of two of them, one of which excited the anger of Antiochus. (This will be referred to later.) In the controversy between Philo and Antiochus there is reason to believe that Philo strengthened his point of view by other written statements. He also wrote on ethical subjects, and a reference to one such treatise is found in Stobaeus.⁹

During the early years of Philo's leadership of the Academy, there were several of Carneades' pupils like Metrodorus of Stratonice, Aeschines, and very probably Charmadas, who maintained that a certain degree of knowledge is possible. Eventually this was Philo's own standpoint. For a long time, however, he was loyal to the teachings of Carneades, and in general he stood until the end for a modified sceptical attitude. Even Cicero said of him that while Philo lived, the Academy never suffered for want of a defender;¹⁰ and St. Augustine testifies that he never ceased protesting against the dogmatism of Antiochus until he died. Cicero admits, however, that he introduced new doctrines into the Academy. He even renewed the old attacks upon the Stoics when he first became president, but after some time he is said to have opened the doors to his enemies.¹¹ His departure from the old principles is reported to have taken place as follows: One day Antiochus asked him a question in the following line of thought, to which he was unable to reply: How could probability exist if there is no basis of truth behind it, and if one accepts the principle of probability, is not the existence of ultimate truth thereby asserted? To save the idea of proba-

bility, Philo was obliged to recognize the existence of the truth, but he remained a Sceptic in the assertion that there is no certain sign of truth. He finally admitted that although there is no sure method of distinguishing between the true and the false, there may be direct knowledge of the probable through the reason. Sextus tells us in plain terms that Philo taught that although the truth cannot be recognized by the *phantasia katalêptikê*, it can be understood in the nature of things.

Philo's chief interest was in ethics. He considered it the aim of philosophy to point out the way to well-being. This requires a detailed system of ethics based upon positive theories. Philo, therefore, could not question the truth of all our concepts. The positive element of his theory of knowledge was the appeal to the understanding which certain statements make. He taught that when a statement seems to us obvious, that should be taken into consideration as an evidence of its truth, even when scientific proof is impossible. Philo does not state in his theory of knowledge that the truth may be known with certainty; he taught rather that a special kind of conviction is connected with the highest degree of probability. Ideas that awaken a perfectly sure conviction in the mind belong to a higher type, so to speak, than those of mere probability, but cannot be characterized as certain. He said that this type of conviction is especially shown in ethical consciousness. The theory of knowledge of Philo was the basis of the practical philosophy of his period, which seems to have had a strong influence. One may thus attribute to Philo a middle stand between Carneades and Antiochus, which explains the statement that he was the founder of the Fourth Academy.¹²

Practical needs, as well as the attacks of Antiochus,

softened the standpoint of the Academy regarding *epoché*. When Philo came to believe in the power of the reason to recognize the truth with a high degree of conviction, he gave himself up to bringing the Academy back to the original teachings of Plato; he even stated that there had never been but one Academy. He agreed with Metrodorus of Stratonice in professing to prove that the apparent Scepticism of Carneades had been directed against the criterion of the Stoics only, and was used to cover the real Platonism that had always ruled the Academy. Metrodorus and Philo are undoubtedly the originators of this idea, which is variously expressed in other places. Philo is called by some the last of the Academicians.¹³

Antiochus of Ascalon, President of the Academy

Philo of Larissa was followed by Antiochus of Ascalon, who was born in 124/7 and died in 68 B.C. He studied in Athens under Menesarchus the Stoic, and was for a long period the pupil of Philo, whom, in all probability, he accompanied to Rome in 88 B.C. There Antiochus made the acquaintance of Lucullus, and the two went together to Alexandria during the time of the Mithridatan War.¹⁴

In the year 79/78 Antiochus was lecturing in Athens, for Cicero attended his lectures there in the Ptolemaion. The old Academy outside the city had been partially destroyed by Sulla, and had, in any case, been less used than formerly as the headquarters of the Academy. Finally, Antiochus accompanied Lucullus to Syria, and died shortly after in Mesopotamia.

At that time interest in philosophy was very great in Rome, and constantly increasing. The most important Romans who inclined

to Academic Scepticism were M. Terentius Varro and M. Tullius Cicero, both younger contemporaries of Philo and Antiochus. These two Romans are considered by some authorities to have definitely belonged to the New Academy. Varro, however, was devoted to general study, rather than to philosophy. Cicero was more closely connected with the history of the Academy than Varro, and believed in the method of arguing for and against a principle, but he wavered too much in his allegiance to the school to be said to have belonged to it. His most emphatic and original teachings refer to the ethical consciousness and the worth of the soul. Owing to his love of philosophical thought and to his interest in Scepticism, we are indebted to him for much of our knowledge of the teachings of the Greek Sceptics, from the time of Pyrrho onward, although Cicero himself cannot be called a Sceptic.

Cicero's ideas did not agree with those of Antiochus altogether, yet he had a deep affection for him. He invited Antiochus to his home when he was old, where he lived with Cicero until he died. Antiochus seems to have been very popular with the Romans, who admired his delightful manners as well as his delicacy of mind, and his eloquence. He numbered Atticus, Lucullus, Brutus and Varro among his friends, as in Alexandria were Dion and Arius Didymus. He was the unchallenged head of the Academy.

Antiochus was at first a Sceptic, but later, under the influence of Panaetius, came to believe that all philosophic systems agree in their principal teachings, and he made it the effort of his life to combat Scepticism and to restore the Academy to the standpoint of its original belief.¹⁵ He attacked in writing Philo's vague stand between Eclecticism and Scepticism, with the result that Philo wrote a book in two volumes against Antiochus, in which he took the ground that Metrodorus had taken, that neither Arcesilaus

nor Carneades was really a Sceptic. He claimed that they had made their apparent Scepticism a means of attack on the Stoics, and a preparation for the study of Plato's teachings, so that the Academy had never changed its standpoint from the beginning. Antiochus, and Heraclitus of Tyre, who was a pupil of Clitomachus and a Sceptic, went to Alexandria together, and they had many a discussion on these subjects. At that time, in 87 or 84 B.C., the books that Philo had written were brought to Alexandria, and there Antiochus saw them for the first time. He could hardly believe that Philo had written them, for he said that he had never heard the doctrines contained in them, either from Philo, or from any one else in the Academy, and in this Heraclitus of Tyre agreed with him. At the time, however, some Roman scholars were present in Alexandria who had heard Philo advance the same ideas in Rome as those which the books contained, and who had also copied the books at Philo's dictation. In these writings Philo altogether denied that the Academicians had ever advanced the arguments that had been heard in the Academy, as it were yesterday. Antiochus published a book in reply to his master which was called *Sosos*. This document best represents the lively strife that was carried on between Antiochus and Philo. The Dogmatism of Antiochus was not the old Platonic kind, but was rather a syncretic creation of his own. It was deeply tinged with the atmosphere of Stoic teachings, corresponded to the eclectic character of his age, and had a strong influence on the later development of the Academy.¹⁸

Of the several known books of Antiochus besides the *Sosos*, Sextus quotes from one called *Canonikā*, a treatise on logic. In one addressed to Balbus, Antiochus maintained that there was no fundamental difference between the Peripatetic and

Stoic schools. Plutarch mentions a book of his entitled *On the Gods*, that he wrote late in life. The fact is interesting that early in life, while he was still a pupil of Philo, he had written a book sustaining his theories.¹⁷ Antiochus, as well as Philo, wandered from the usual method of his predecessors of using quotations from dialectic discussions and literary and historical illustrations. In his book on logic, he gives a scientific illustration, definitely citing the distinguished physician Aesclepiades as proving that knowledge comes from the senses as well as the reason.

The break between Philo and Antiochus occurred when Antiochus received Philo's book in Alexandria. After this contest, Antiochus had no other aim in life than to bring the Academy back to Dogmatism, in which attempt he succeeded. Thus, Antiochus defended Scepticism in his youth, and Dogmatism in his old age. He deserted Philo when he began to have pupils himself.

In his attempt to restore Plato, Antiochus, unfortunately, did not have recourse to the original works of Plato, but used Xenocrates, Polemo, and the dialogues of Aristotle. His opinions, however, were strongly tinged with Scepticism. He claimed that he followed the so-called method of Carneades, i.e., to separate from each other all possible theories in order to eliminate the incorrect ones, and thereby find the probable truth. The result with Carneades was *epoché*; with Antiochus, it was the belief in the possibility of finding the truth. He considered Philo's position increasingly untenable, which was that, although certain knowledge is impossible, there is a kind of conviction that comes between probability and knowledge. Antiochus finally maintained that without sure conviction there can be no rational conduct in life. His fundamental teaching in the latter part of

his presidency of the Academy was that the principles of all the schools were really identical, and that the truth was to be found in all of them.

Like Carneades, Antiochus considered ethics the most important part of philosophy. Although he claimed to lead the Academy back to Plato, he did not, like his great master, teach that external goods are indifferent. He taught, it is true, that virtue is sufficient to produce well-being, but that the good things of life are needed to bring it about in its highest degree.

Many authors reproach Antiochus for making the victory of the Stoics possible, in the long controversy between the two schools, and for establishing them in the Academy. Some writers even accuse him of being a Stoic himself.¹⁸ The fairest judgment regarding him, is that he was an Eclectic.

With Antiochus ends the history of Scepticism in the Academy.

PART V

PYRRHONISM IN ALEXANDRIA

CHAPTER XX

PYRRHONISM AND MEDICAL SCIENCE

During the period when Scepticism was the acknowledged teaching of the Academy, Pyrrhonism was gradually growing in Alexandria.

Ptolemy I was a great man, a scholar and an author of distinction. He had enjoyed a large world experience before he established his kingdom in Egypt. His attachment to Alexander the Great is evident from the fact that he accompanied him to India and afterward wrote his biography. He wished to make the city of Alexandria a center of intellectual life worthy of his master for whom it was named. For this purpose, he assembled as many distinguished scholars as possible. Of these Euclid was one. In the philosophical group was found Stilpo, the Megarian. There was also a man named Hecataeus, spoken of in history as a disciple of Pyrrho.

The immediate background of the new spirit in Alexandria was the philosophy of the schools in Athens; namely, the Academy, the Stoa, the Garden, and the Lyceum. Scientific interests had predominated in the Lyceum during its early years and progress in this line had been so remarkable while Aristotle was president, that when Ptolemy I began his career in Alexandria he turned, instinctively, to the Lyceum for help. Aristotle, however, had died and Theophrastus,

who was only a few years younger, was president of the school. He differed slightly from his master in his point of view, and continued his work in science more in the spirit of Democritus.¹ Theophrastus had a great reputation not only in Athens but abroad, as stories of his scholarship had been spread throughout the whole world of his time. Ptolemy I, therefore, sent him an urgent invitation to join the group in Alexandria. Theophrastus, however, was unable to leave the Lyceum, as he considered himself responsible for carrying on the work of Aristotle. When Ptolemy I found that he could not secure Theophrastus, he sent for Strato the Physicist, as he was called, one of Theophrastus' pupils. Strato was for a time the tutor of Ptolemy II. His work in physics was extensive and his influence strong in all forms of scientific research. He substituted the idea of persistent energy for the anthropomorphic gods of the Greek religion. He put physics on an experimental basis, and created the first attempt at scientific chemistry. He was afterwards President of the Lyceum, and its last great leader.

The outstanding achievement of the Ptolemies was the creation of the Alexandrian Library. This library contained the Hippocratic Corpus, a collection of seventy-two books by Hippocrates and other writers. The books of Democritus were found there early in the history of the library. All the Greek classics were there, and many old philosophical works. Ptolemy made a calendar of the stars, and in making this studied those that were already in existence, among which that of Democritus was the earliest.² As time went on, the collection became rich in works on astronomy and mathematics, as both Euclid and Archimedes contributed. The large libraries of Aristotle and Theophrastus, as well as other valuable collections, were eventually taken to Alexandria.

The university and the library could not have been a sudden growth, but the building in which they were housed is described as belonging to the time of Ptolemy II. It was in the royal residential quarter of the city and contained a large hall and a spacious dining room. In imitation of the Lyceum, it had a covered philosophers' walk, which Strato helped to plan.³ Both the university and the library were at first called by the same name, i.e., the Museon, or temple of the Muses, the origin of our word museum. The idea of the library as a center of research came from Athens, but in the later development of learning, Alexandria took the lead, as Athens had done in the preceding period.

Pyrrhonism was represented in Alexandria from the time of Ptolemy I, where it found congenial surroundings. Besides the contact made by Hecataeus, and possibly by Timon himself, there is an obscure statement that Pyrrhonism was carried on in that city through Xanthus, the son of Timon. We know that Xanthus was a physician and also the leader in the Pyrrhonic movement after Timon died. He may have originated the connection between Pyrrhonism and the empirical physicians.⁴

It was under the Ptolemies that Alexandria became not only a seat of scientific and literary research, but the most important medical center of the world. Ptolemy I helped the progress of this profession by handing the bodies of criminals over to the doctors for dissection. The Empirical sect in medicine, of which many prominent Pyrrhonists were members, was made possible by the rise of scientific Empiricism in Alexandria. The two great medical leaders were Herophilus and Erasistratus. Herophilus (300 B.C.) was a native of Chalcedon on the Marmora — now a suburb of

Constantinople — and studied in the medical school at Cos. Erasistratus (258 B.C.), the other great figure in Alexandrian medicine, studied under the same teacher, Praxagoras of Cos.

The two great tendencies in medicine in Alexandria were characterized from the beginning as theoretic and experimental, or dogmatic and empirical. At first the Dogmatics went far deeper in their medical foundation. They studied Hippocrates and Democritus and Aristotle, and aimed to show the relation between medicine and the natural sciences. This stage of their development, however, was followed by a marked degeneration and ended in long drawn out philosophical discussions. Those who founded their practice on experience, on the contrary, were in the beginning more superficial, but as time went on developed the real scientific point of view. They studied the methods of Democritus, Hippocrates and others of the old scientists, but relied chiefly on observation and research in their medical treatment. The Empirical School, as such, was founded by Philinos and Serapion. Philinos was from Cos (250 B.C.), and was a student of Herophilus. Serapion was a physician in Alexandria (220 B.C.).

The era of Herophilus and Erasistratus in Alexandria coincided with the time of the presidency of Arcesilaus in the Academy in Athens. It was at this time that the conflict with the Stoics began. Philosophy was strong in Alexandria as well, and connected from the beginning with progress in medicine. In fact, philosophical discussions were so decided an element of public interest that the special motive for founding the Empirical School of Medicine is said to have been philosophical. Yet scientific medical research was not neglected but even as early as the third century B.C. was con-

stantly promoted. Herophilus was the first to make far-reaching investigation of the eye, and studied especially the anatomy of the brain. He also emphasized pharmacology and gynecology, and partially outlined in advance the principles of the Empirical School. Erasistratus discovered that the veins and arteries were distinct in their functions, although he still believed that the breath circulated in the latter. He came the nearest, however, of all the physicians of his time to the discovery of the circulation of the blood. At first his school was overshadowed by that of Herophilus, but later they became distinct rivals.⁵ Owing partly to the spirit of progress in scientific research in Alexandria, and partly to the rivalry between the two schools, great advances were made in surgery as well as in the practise of medicine. Anatomy was placed on a surer foundation and the organs of sense perception were studied.⁶ The Pyrrhonists identified with the beginning of the growth of the Empirical School had probably not organized a movement, but individuals among them who studied medicine chose that school as best suiting their purpose.

The moral attitude of the medical profession is shown to have been based upon a high code of honor by the careful directions given to physicians as early as the fourth century B.C. The purely inductive method of Hippocrates constituted the scientific tradition of the Empiricists of Alexandria: e.g., his minute observations of symptoms and of the progress of disease by bedside notes; his ascription of all disease to natural causes; and his belief in the curative power of nature. In the medical literature of the Empirical School, a sharp contrast is drawn between the true physician and the charlatan. The doctor is told how to enter the house and to approach the bed of the patient. He must dress modestly,

and not use too much perfumery. He must show a friendly manner and visit his patient frequently. On the financial side, he must be noble, and not demand too high a fee; he should not mention money at all before the cure, as it might excite the mind of the patient. He must in his method of treatment guard against all superstition.⁷

The opposition of the empirical physicians to the dogmatic method increased until theoretical causes were derisively called occult, or causes that belong to the unknown, that is to say, unscientific conceptions. They claimed that the ultimate causes of health and disease could not be known even by the philosophers themselves; and, therefore, to base practice upon them could not be scientific. "If theoretical medicine is to be followed," they said, "let us look to the philosophers." The empirical doctors themselves taught that medical practice does not rest on theories but on experience. They claimed that practice and experience alone were necessary for success in the profession. They did not disregard the history of medicine, however, and the neglect of theories attributed to them was probably exaggerated in the polemics of the time. Even from an early period they expressed strong opposition to the Dogmatics, and practically gave up theoretical speculation as such, gradually joining the Pyrrhonists. These discussions were so bitter that the effect on the different medical schools was very decided. The empirical physicians professed to be the true followers of Hippocrates, but in order to prove an earlier source of their teachings than the Dogmatics had, they referred back to a certain Acron, an eminent physician from Agrigentum in Sicily, of the fifth century B.C. Medical treatment of animals found a large place in their practice, especially of horses, so important in the military and sport life of the time.⁸ Under

these conditions Pyrrhonism increased greatly and was organized as a special movement about 65 B.C.

The profession of medicine, like all forms of learning, became more dogmatic during the last century B.C., and this was largely due to Roman influence. Greek medicine dominated Rome until the time of the older Pliny. There were no Roman trained physicians in those early years, and even those who came later used the Greek language.⁹ The first Greek physician went to Rome as early as the days of the Catos (second century B.C.). The Senate showed him the honor due a distinguished surgeon, arranging an office for him, which seems, however, to have been but a kind of stall. This was in the era of the greatest progress in Alexandria, when recent anatomical discoveries had enabled surgeons to perform skillful operations. At first the doctor in question had a large following, but later on the Romans were much frightened by some of his operations and called him a slaughterer.¹⁰ Old Cato was sure that the Greeks had sworn to kill all the "barbarians," as they considered the Romans, by surgery and poisonous medicines. He said that he distrusted all Greek physicians, and quoted Hippocrates as once having said he would never give his services to barbarians who were the enemies of Greece.¹¹ Cato declared that he himself had a book of recipes for medicines which were quite sufficient for all emergencies. When the Romans began to study medicine, their first physicians were either slaves or men who had been freed from slavery. Gradually, however, Greek physicians gained great repute in Rome. Caesar gave them the right of citizenship, and Quintilian asked sarcastically who were the most useful to the state, "orators, philosophers or physicians" ? Doctors were given official positions in the army, especially for the benefit

of the gladiators, and later they were paid unbelievable salaries for that service.

Asclepiades of Rome (about 40 B.C.)

The rise of the profession of medicine in Rome, and the emphasis on its practical side prepared the way for the advent of Asclepiades in the time of Pompey, who was one of the most interesting personalities in medical history, and had a strong influence in shaping methods in the practice of medicine. This strange but attractive physician founded the new sect called Asclepiadians, which had numerous adherents. He was born in Bithynia, the son of a physician, lived in Rome, and was a contemporary of Antiochus of Athens.¹² He was not a thoroughly educated physician, and began his professional career as a teacher of rhetoric, a training which doubtless gave him additional influence in spreading his new doctrines. He was a man of sharp reasoning powers, quick intuitions, and used remedies with such effect that he was thought to have a supernatural gift. He is said to have added greatly to his fame by restoring a man to life whose funeral was about to be celebrated. He himself enjoyed remarkable health, and on one occasion stated that if he were known to be ill, he should no longer wish to be considered a physician. In reality he was never ill, but finally died from an accident at an advanced age. In his work we find additional proof of the marked tendency of his time to unite medicine and philosophy. He studied all systems of philosophy, probably in a superficial manner, and finally embraced some of the principles of Epicureanism. According to his philosophy, body and soul were alike composed of fine particles called atoms, which are indivisible and have existed in

constant motion from all eternity. Health and illness result from the normal and abnormal relations of these original elements of the organism. The interstices between the atoms were called pores. He believed the soul to be a compound of bodily senses, and that there was no faculty of reason.¹³ Asclepiades was especially deficient in anatomical knowledge. However, he gave the impetus to the founding of the Methodic School, so closely connected with Pyrrhonism.

The Methodic School

The most important of the followers of Asclepiades was Themison, who nominally founded the Methodic School, which, in reality, rested upon the principles laid down by Asclepiades.

Themison (30 B.C.) was a man of whom Sextus Empiricus speaks with great respect.¹⁴ He was a Greek from Laodicea and court physician to Emperor Augustus. The Methodic School was evidently founded in Rome and had a branch in Alexandria. The great motive of this school was to prevent the misuse of remedies. Many Pyrrhonists belonged to it and Sextus Empiricus said that he preferred it to the empirical, as being more in accord with Pyrrhonism.¹⁵

In Rome, the school was represented by Soranus, Caelius, Aurelianus and many others. The philosophic basis of this school was the standpoint of Epicurus, in so far as any positive teachings were permitted. Asclepiades, the real source of its teachings, was a contemporary and possibly a friend of Lucretius, the Epicurean. The Methodics, like the Empiricists, neglected all investigation regarding the causes of disease, and only taught the use of medicine according to the result of experiment. It goes without saying, however,

that the use of experiment in medical science without any anatomical research, or study of physiological causes of symptoms, must rest consciously or unconsciously on some theoretical teaching or habit of thought. The basis of practise in the Methodic School and that in the later Empiric School was the theory of probability so well outlined by Carneades. We see from Sextus Empiricus that the later Pyrrhonists strongly objected to the doctrine of probability taught by Carneades, as being veiled Dogmatism, yet in their medical practice, whether as Empiricists or Methodics, they demonstrated the strong practical influence of that doctrine.¹⁶ As a result of the later practical tendencies of medical science, exhaustive works in pharmacology were everywhere produced.

Heraclides, the Teacher of Aenesidemus

The development of medical science in Alexandria gives us, in part, the historical explanation of Aenesidemus. His teacher was Heraclides of Tarent, who lived in Alexandria in the first half of the first century B.C.¹⁷ Heraclides was a pupil of Mantias, and was in the beginning a Herophilian, but afterwards became an Empiricist, and one of the most celebrated of that sect. He was in many respects a man of broad ideas and used experiment to lead to a knowledge of causes.¹⁸ The influence of Heraclides' interest in cause is very evident in the career of Aenesidemus, and in the subject of his books. In his medical system Heraclides emphasized the *posotis* (quantity — one of the maxims of Pyrrhonism), also to be traced further on in the Tropes of Aenesidemus. We may with justice call Heraclides one of the influences which shaped later Pyrrhonism. His date is approximately

160-88 B.C. He was a prolific writer, and among his books was one on the Empirical Sect of Medicine.

The connection between philosophy and medicine, so noticeable in the development of Pyrrhonism, continued for many centuries to such an extent, that in engaging a physician, one naturally asked to what school of philosophy he belonged.

CHAPTER XXI

AENESIDEMUS, THE NEW PROPHET OF PYRRHONISM

Academic Scepticism changed to Eclecticism in the first century B.C., but many Sceptics from the Academy joined the Pyrrhonists, and helped to develop their new movement. Their protest against the Academy was based upon the uncritical character of Eclecticism; doubt, however, never again gained the breadth of influence and power that it had enjoyed in the Academy. The thought of later Pyrrhonism, nevertheless, was much enriched by the philosophy of Arcesilaus and Carneades from which they used its strongest weapons.

Aenesidemus is one of the most important characters connected with the whole history of Greek Scepticism. In relation to the Academy, he came at the end of its sceptical development, and his protest was lost in the swift rise of an overwhelming Dogmatism; in relation to Pyrrhonism, he came at the beginning of a new era, and gave a strong impetus to the movement, especially in dialectic lines. Although not a physician, his work was far-reaching in the medical world of his time where he was one of a series of influences uniting medicine and philosophy. Aenesidemus was a teacher, probably of philosophy and rhetoric, who lived in Alexandria. He was born in Cnossus in Crete, according to Diogenes Laertius, but Photius tells us that he came from Aegae.¹ We know very little more of his per-

sonal history, except that he was a friend and admirer of Lucius Tubero, the friend of Cicero.²

Our only way of understanding Aenesidemus is from the influence of his books on the literature of the time immediately following his life, and through quotations from them in other sceptical writings.

Pyrrhonism Reorganized

The first to reorganize the Pyrrhonic movement is said to have been Ptolemy, the Cyrenian. The authority for this statement is Menodotus, a skilful physician who lived about 100 A.D.

The testimony of Menodotus and Apollonides regarding the history of Pyrrhonism immediately after the time of Timon is interesting from various points of view. Apollonides shortly after the Christian era, and Menodotus more than half a century later found material at hand from which they could make authoritative statements about Pyrrhonism and the successors of Timon. Geographically, they show the wide extent of Timon's influence. Menodotus was from Nicomedia, that beautiful city on a bay of the Marmora, about sixty miles from Constantinople. Apollonides came from Nice, a city some miles inland from Nicomedia, and well known in later history from its prominence in connection with the Christian Church and the Nicene creed.

Hippobotus and Sotion mention four men who were pupils of Timon: namely, Discorides of Cyprus, Nilolochus of Rhodes, Pracylus of Troy and Euphranor of Seleucia, who is given as the master of Ptolemy. Euphranor lived, presumably, in Athens (225-200 B.C.) and when Chrysippus came out so strongly against Scepticism, he wandered to Alexandria where Sceptics were in greater favor. Euphranor had as a pupil Eubulus. Galen says that Eubulus was the master of Ptolemy, which is not entirely contradictory, as Eubulus

was a pupil of Euphranor. There is, however, some confusion regarding the dates of these men. Hippobotus wrote the *Lives of the Philosophers* at an early date. Sotion was a philosopher in Alexandria who wrote the *Lives of the Philosophers* about the end of the third or beginning of the second century B.C.

We do not know just what Ptolemy did to advance Pyrrhonism, but it is certain that it did not come into marked prominence until the time of Aenesidemus. Ptolemy may owe the reputation of having reorganized it to the philosophical influence which he possessed in some one of the medical sects in Alexandria.

There is much in the standpoint of the attack which Aenesidemus made upon the Academy in the first book of his *Pyrrhonic Discourses* to prove that the Pyrrhonic School had a fixed and well-known system of tenets. Aenesidemus constantly refers to the Pyrrhonic teachings, giving them preference over those of the Academy. These principles were not formulated to any extent in Pyrrho's time. Aenesidemus is not referring to formulae of his own creation when he contrasts the beliefs of the Pyrrhonic school with those of the Academy. Aenesidemus himself, as quoted by Menodotus, stated that Pyrrhonism as an organized school had not continued after the time of Timon. Pyrrhonic tenets, however, were known to the philosophic world in Alexandria, and, therefore, it must have had a strong influence there, even if it was not an avowed school. Aenesidemus, in contrasting Pyrrhonism and the Academy, always speaks of the former as a fixed set of opinions to which he may refer (negative opinions to be sure, but no less opinions). He would have spoken quite differently if Pyrrhonism were a new power, brought into existence by Ptolemy, who did not live so very long before his own time.³

The Historical Setting of Aenesidemus

Philosophically, Aenesidemus forms a bridge between old and new Scepticism. Sextus classed him with the older Sceptics, and his opinions were in many things in accord with those of the older Pyrrhonists.⁴ In his relation to Heraclitus, to medicine and to Academic Scepticism he stood at the end of a long line of doubters. In his relation to Pyrrhonism, however, he stood at the beginning of a new movement, for he was the father of a new formalism, and the one who made the later existence of the school possible. He probably began his philosophic career in the Academy, and was one of the many who were dissatisfied with its dogmatic tendencies. The proof of his connection with the Academy we find in Photius, who states that he dedicated his principal work, *Pyrrhonic Discourses*, to Lucius Tubero, a Roman Academician, and speaks of him as his fellow companion in the Academy. This view is sustained by the fact that he devoted the first book of his principal work to the differences between the two schools. The Academy was especially strong in Alexandria in the first half of the first century B.C., which is the time when Aenesidemus must have lived, and he probably belonged to it, under Philo of Larissa.

The date of Aenesidemus is fixed by the fact that Philo of Alexandria, who wrote about 10-30 A.D., speaks of him, and uses his writings freely as if they were authoritative. Another argument for this date is the dedication, to which reference has previously been made, of *Pyrrhonic Discourses* to Lucius Tubero, presumably the Tubero who was a contemporary of Cicero.⁵ Internal evidence from the books of the Tropes against the philosophy of cause. Books sixth to

whom he dedicated his principal work lived at the same time as Cicero and Philo. This opinion also harmonizes with the period of greatest influence in the life of Aenesidemus, which is considered to have been from 85 to 65 B.C.⁶

Furthermore, Aenesidemus said that he wished to show the difference between the standpoint of the Academy and Pyrrhonism. This presupposes that the difference is not self-evident, as it would have been in the later period of Antiochus. He also accuses the Academicians of being Dogmatics, which they would not have resented later than the time of Philo of Larissa. He says that they used Stoical teachings in fighting the Stoics, and Philo was the last Academician who fought the Stoics, for Antiochus introduced Stoical doctrines into the Academy.⁷

Finally, Aenesidemus attacks the Academy for considering knowledge possible regarding the chief good according to nature, but incomprehensible through the *phantasia katalêptikê*, which is exactly Philo's standpoint. He also refers, in this connection, to "distinctness," which was one of Philo's favorite expressions. From all this evidence we infer that it was in the time of Philo of Larissa that Aenesidemus could not accept the teachings of the Academy. The very fact that he writes as if the question of Academic Scepticism is a burning one, shows that he could not have written much later than Cicero.⁸ Aenesidemus' writings did not have influence in Rome during the lifetime of Cicero, as the latter speaks of Pyrrhonism as long since extinct, and Seneca also says, "Quis est qui tradat praecepta Pyrrhonis." Aenesidemus refers to Antiochus as a contemporary, according to Photius, but Antiochus must have been a younger man.

The influence of Aenesidemus seems to have been strongest after his death; we have very little proof that he was well

known during his own time, especially in Rome. He was probably at the head of the Pyrrhonic School in Alexandria in the earlier part of the first half of the first century B.C. (about 88 to 65 B.C.). It may have been even earlier, yet Aenesidemus must have written *Pyrrhonic Discourses* about the time that Philo of Larissa's books reached Alexandria, that is, 87 to 84 B.C., in which he said that Arcesilaus and Carneades had pretended Scepticism for the sake of their opponents, practically asserting also that he himself was pretending Scepticism. Aenesidemus also claims that the Scepticism of the Academy was not sincere.

The question naturally arises why a man who was trained in the Academy should have turned to Pyrrhonism rather than have made an effort to establish anew the Scepticism of the Academy. Suggestions toward the solution of this problem may be found in the following facts: A Pyrrhonist, Heraclides of Tarent, was the teacher of Aenesidemus. Pyrrhonism may possibly have gained strength from the time of Ptolemy onward. The general medical relations of Aenesidemus, also, through his master and other associates, may have influenced him.

Sources of the Scepticism of Aenesidemus — His Writings

We find the sources of the Scepticism of Aenesidemus in the teachings of the Academy, in early Pyrrhonism and in the Empiric School of medicine. The dialectic side of his Scepticism he owed to the Academy, and the empirical side to the other sceptical influences which had been strong about him. The writings of Aenesidemus, as far as they are known to us, are eight books of *Pyrrhonic Discourses*, a book entitled *Against Wisdom*, a treatise on *Investigation*,

Pyrrhonic Sketches, and a voluminous work called *The First Introduction to Principles*.⁹ These books are all lost, and the only one of them which we know well is *Pyrrhonic Discourses*, through the analysis given by Photius, who gives the first book at length, and a shorter resumé of the others. It was the aim of this work to establish a Scepticism so radical as to entirely destroy belief in positive relations. The first book of *Pyrrhonic Discourses* begins with an analysis of the differences between Pyrrhonism and the Academy. Aenesidemus denounces the Academy for two reasons.

- I. Its Scepticism had never been satisfactory.
- II. In the time when Aenesidemus wrote, it was becoming even less so, and was constantly approaching more nearly to Stoicism.

Aenesidemus claimed, with Philo of Larissa, that Scepticism in the Academy had been a veiled Dogmatism even in the most sceptical period, i.e., in the time of Arcesilaus.¹⁰ The reason which he gives for this indictment is that things were discussed in the Academy as realities, which true Sceptics had no right to regard as such. He gives as examples, virtue and its opposite, good and evil, truth and falsehood, being and non-being. He said that a school which called Plato its founder could never be truly sceptical. In this first book, Aenesidemus deals fully with the philosophy of Pyrrho, and states that the Pyrrhonists make no assertions. They do not say that reality may or may not be known, that things are true or untrue, probable or improbable.¹¹ Books second to fifth contain a critique of the logic, physics, and metaphysics of the Dogmatists, meaning especially the Stoics. The fourth book treats of signs. The fifth book contains the Tropes against the philosophy of cause. Books sixth to

eighth give the ethical grounds of the attack upon the Stoics. The *Pyrrhonic Discourses* were the principal work of Aenesidemus, and contained a summary of all his sceptical theories.¹² The *Pyrrhonic Sketches* consisted of the Tropes of *Epochê*, as arranged by himself.¹³

The three most important subjects of which Aenesidemus treated, considered in their relation to Pyrrhonism were:

- I. The Ten Tropes of *Epochê* (suspension of judgment).
- II. The Eight Tropes against the Philosophy of Cause.
- III. The Relation of Pyrrhonism to the Philosophy of Heraclitus.

We shall try to analyze the work of Aenesidemus in the order of these subjects.

CHAPTER XXII

THE TEN TROPEs OF EPOCHÊ

The Tropes of *epochê* express the principles of later Pyrrhonism systematized and arranged by Aenesidemus.¹ It is certain that he was the first to formulate and arrange the ten Tropes, yet he refers to them as the "Tropes of Pyrrhonism," as if they already existed. His whole attitude toward them sustains the opinion that they had gradually arisen from the traditions and explanations of Pyrrho's teachings, during the two centuries which had elapsed without a fixed status of a Pyrrhonic school.

These Tropes are more closely connected with the thought of earlier times than with that of Aenesidemus. This is especially evident in their illustrations. Their decidedly empirical character shows that they belonged to an earlier date, for they differ greatly in this respect from the eight Tropes against Aetiology, which were original with Aenesidemus.

The number *ten* reminds us of the ten opposing principles of Pythagoras, and the ten categories of Aristotle, the fourth of which was the same as the eighth Trope. The terminology, with few exceptions, points to a somewhat later period than that of Pyrrho. Zeller, however, points out a number of expressions in both Diogenes' and Sextus' exposition of the Tropes, which could not date back farther than the time of Aenesidemus.² One of the most striking features of the whole presentation of the Tropes, especially as given by Sextus, is their mosaic character, which stamps them not as the work of one person, but as a growth, and also an agglutinous growth,

lacking very decidedly the symmetry of thought that the work of one mind would have shown.

The ten Tropes of *epochê* are given by Favorinus, Aristocles, Sextus Empiricus and Diogenes Laertius. They are found also, wholly or partly, in other books.

These Tropes represent the sum total of the wisdom of the older Sceptical School, and were held in high respect for centuries, not only by the Pyrrhonists, but also by many outside the narrow limits of that school.

By the name *topos*, or *tropos*, the Sceptic understood a manner of thought, or form of argument, or standpoint of judgment. It was a term common in Greek philosophy, used in this sense, from the time of Aristotle.³ The Stoics, however, used the word with a different meaning. Stephanus and Fabricius translate it by the Latin word *modus*, and *tropos* also is often used interchangeably with the word *logos* by Sextus, Diogenes Laertius, and others; sometimes also as synonymous with *topos* and *tupos*, as found in the oldest edition of Sextus. Diogenes defines the word as the standpoint, or manner of argument, by which the Sceptics arrived at the condition of doubt, in consequence of the equality of probabilities, and calls the Tropes "The Ten Tropes of Doubt." All writers on Pyrrhonism after the time of Aenesidemus give the Tropes as their chief authority. Sextus fills two-thirds of the first book of the *Hypotyposes* discussing them; Diogenes devotes about one-fourth of his presentation of Scepticism to the Tropes. Aristocles, the Peripatetic, also refers to them in his attack on Scepticism.⁴ Favorinus wrote a book entitled *Pyrrhonic Tropes*, and Plutarch discussed them in one of his books.⁵ These two last mentioned works are lost. All authorities unite in attributing to Aenesidemus the work of systematizing and presenting to the world the ten Tropes of *epochê*. He was the first to oppose an organized philosophical system of Pyrrhonism to the Dogmatism of his contemporaries. Moreover, the fact that Diogenes introduces the Tropes into

his life of Pyrrho, does not necessarily imply that he considered Pyrrho their author, for Diogenes invariably combines the teachings of the followers of a movement with those of the founders themselves. He quotes these Tropes after speaking of Aenesidemus' work entitled *Pyrrhonic Hypotyposes* from which he had apparently taken his presentation of Pyrrhonism. He may have gained his information, however, only through the writings of others. No writer claims for the Tropes, as arranged by number, an older source than Aenesidemus, to whom Aristocles also attributes them. They are not mentioned in Diogenes' life of Timon, the immediate disciple of Pyrrho. Cicero apparently has no knowledge of them, and he does not refer to them in his discussions of Scepticism.

The ten Tropes of *epochê* illustrate the relativity of knowledge. Windelband has arranged them logically, as follows: ⁶ "Perceptions change not only with the different species of animate beings (I), not only with different men (II), according to their customs (IX) and their whole development (X), but even in the case of the same individual at different times (III), in dependence upon bodily conditions (IV), and upon the different relations in which the individual finds himself with regard to his object spatially (V). They change, also, because of the difference in the states of the object (VII), and have, therefore, no claim to the value of a reliable report of things, because their origin is conditioned on intermediate states, through media such as the air, the coöperating elements furnished by which we are not able to know (VI). Man is, therefore, in all ways, not in a condition to know things directly (VIII), and in the face of the multiplicity of impressions so full of contradictions he has no means of distinguishing a true from a false impression."

Sextus gives us the Tropes in a concise form, and the order he says he has made himself.⁷

- I. Based upon the variety of animals.
- II. Based upon the differences between men.
- III. Based upon the differences in the constitutions of the sense organs.
- IV. Based upon circumstances.
- V. Based upon position, distance and place.
- VI. Based upon mixtures.
- VII. Based upon the quantities and constitutions of objects.
- VIII. Relation.
- IX. Based upon frequency and rarity of occurrences.
- X. Based upon systems, customs and laws, mythical beliefs, and dogmatic opinions.

The order is varied by different writers.⁸ Philo and Aristocles give only nine Tropes. It is evident that the order was not considered important, but the balance of authority rests decidedly upon ten as the original number, rather than nine.

All authors who present the Tropes of *epochê* as a part of the Pyrrhonic teachings, give them with extended explanations, and a wealth of illustration that varies according to the mind of the writer. The most important testimony regarding them, and, in fact, regarding Aenesidemus' immediate philosophic influence in general, is found in the works of Philo of Alexandria and of A. Cornelius Celsus of Rome. Both of these men were much influenced by Aenesidemus, although they differed from each other wholly in professional interest, aim of life, philosophic opinions, and standpoint of judgment. They were more nearly contemporary with Aenesidemus than the other writers mentioned, who have quoted from him. It is claimed that the original form of the Tropes of *epochê* is to be found in the book *On*

Drunkeness, by Philo of Alexandria.⁹ A strong reason for this opinion is that Philo lived approximately two centuries nearer to the time of Aenesidemus than did Aristocles, Sextus, and Diogenes, and about one century nearer than did Favorinus. In the case of Favorinus, also, his two books on *Pyrrhonic Discourses* are lost, and we nowhere find an exact quotation of his statement of the Tropes of *epochê*. The testimony of Philo is, therefore, of far greater value to us than that of any other writer. Taking into consideration all the possibilities of inaccuracy regarding the date of Aenesidemus, Philo could not have been separated from him more widely than two generations. In considering the Tropes as given by Philo of Alexandria one must remember, however, that the personal equation with him was a strong one, as he was far from being a Sceptic. There are two points regarding his version of the Tropes that are noteworthy:

- I. Their agreement in substance with those given by Sextus.
- II. Their strong Heraclitan coloring.

Philo of Alexandria was a mystic and a theosophist, an Israelite, whose motive in writing was to produce a deeper understanding of his national religion and a purer knowledge of God. In his introduction to a statement of his theosophic ideas, he tries to prove that knowledge gained by the senses is uncertain. He, furthermore, states that the only knowledge of reality which does not deceive is knowledge of God. This introduction to his book on Theosophy was formerly supposed to be his original work, written under the influence of Academic teaching, but a careful examination of it shows that it contains all but one or two

of Aenesidemus' Tropes of *epochê*.¹⁰ In fact, the line of argument presented by Philo has no resemblance whatever to Academic thought. The acquaintance of Philo with Scepticism is very easily explained, for his best years were from 30 B.C. to 10 B.C., and he grew up in Alexandria where Pyrrhonism was then flourishing. He could even, perhaps, as a young man have known Aenesidemus. Philo says in brief that such obscurity reigns in the world of sensation, and over all objects of sensation, that research is either utterly unable to lead to any clear results, or if the results of investigation seem to be logical, they are true only of the world of present experience and do not give us the underlying truth. He goes on to state that if we always reacted to the same stimulus, and owed our sensations and ideas to the same objects, we might infer that our sources of knowledge, i.e., the senses and the mind, were reliable, but this is not the case. Both outer and inner conditions are constantly changing, even the perceptions do not remain the same. This is seen in the animals (I), in ourselves and other human beings (II). Every natural and unnatural change in ourselves (IV), and every change of position of place or distance (V) is a cause of change in our reactions. It follows that nothing can be judged in itself, but only in connection with its opposite (VIII). The impression which cannot itself be trusted certainly does not give knowledge that is trustworthy. The results of sense perception are never the real thing, but are always indefinitely mixed and complicated with other things (VII). Colors and tastes furnish a good example of this. The world of sense is not only confused and indistinct (VI), but never permanent, never fixed, and involved in eternal flux. Knowledge of the real nature of a thing is, therefore, very difficult, if not

impossible. In and around us are a series of causes of false perceptions, such as natural corruption and involuntary mistakes. We deceive ourselves, like those who are asleep and in their dreams believe that they perceive the nature of things distinctly.

We find here all of the Tropes as given by Sextus except the third and ninth, but the tenth is divided into two parts. Philo probably used the arguments that he considered the strongest for his purpose, without regard to exact expression or order. We shall refer later to the strong Heraclitan bias of Philo's presentation of the Tropes.

Turning now to a very different authority, the Roman contemporary of Philo, A. Cornelius Celsus, we find again early traces of the Tropes of *epochê*. Celsus could not have died later than 65 A.D. He was a physician and a Sceptic who belonged to the Empirical School of Medicine. The sceptical element in his writings is very strong, and resembles the teaching of the Empiricists. It is one of the best proofs of the wide-reaching influence of Aenesidemus that his writings found recognition in the Roman medical literature immediately following his time. The works of Celsus include the largest part of the medical knowledge of his age, and he builds the Empirical system of medicine on the Tropes of Aenesidemus. Celsus probably wrote sometime during the period from 23 B.C. to 48 A.D., and the Pyrrhonic principles penetrate all his medical teachings.¹¹ He claims that the real beginning of medical culture was the union of medicine with philosophy. The sources of his material are the writings of the Pyrrhonists and the Empiricists, as found in Greek books of his time. Celsus, in his medical writings, as well as Aenesidemus in his philosophy, makes his avowed motive the search for truth. In basing his med-

ical system on the Tropes of *epochê* he often used sceptical formulae. He recommends *epochê* in diagnosis of diseases; open-mindedness for the surgeon; restraint in use of food and medicine for the patient. Calmness was also prescribed to women in childbirth, and the constant regard of the physician of the famous sceptical maxim, "nothing in excess," was recommended to the physicians:

Celsus was not the first nor the last Roman to represent Pyrrhonism; but the spirit of Greek Scepticism in its noblest form has penetrated his writings more than those of any other Roman whose works we possess. His explanation of the familiar theory that the unknown cannot be comprehended is such as to prove that the sceptical sects of his time used the same sequence of ideas in this regard. He also shows the effect of sceptical influence in his use of the formulae "Without Pride," "Mere Opinion," "Assent," and "The Sign," besides others before referred to. Celsus used especially those Tropes of Aenesidemus which were related to principles affecting medical theories. It is not, however, as much in short, concise statements that one finds the influence of sceptical principles, as in his whole method of thought. He wrote in Latin, but his books were either translated from Greek, or modelled after a collection of Greek medical works dating from earlier times. His history of medicine was a book destined to live through succeeding ages.

CHAPTER XXIII

THE EIGHT TROPES AGAINST THE PHILOSOPHY OF CAUSE

The critical thought of Aenesidemus is shown in his attack on the idea of a first cause or ultimate reality. His thesis is that the mind must confine itself to what is called in common parlance "actual facts," that is *phenomena*, things as they appear to us in our actual experience.

In addition to the ten Tropes of *epochê*, Aenesidemus gave to the world eight Tropes against aetiology, or the philosophy of cause, eight reasons why there can be no sure connection between the world of phenomena, of which we are an inextricable part, and a possible world of reality. These Tropes are critical in character, and decidedly differ, both in style and method of reasoning, from the Tropes of *epochê*. They furnish an added proof that Aenesidemus was the compiler only, and not the originator of the Tropes of *epochê*. In the eight Tropes against aetiology, we find a keen dialectician and a critical Academician. They do not reveal an empirical Pyrrhonist whose illustrations are taken from scientific and medical sources, or an author whose thought ranges over subjects of varied interest, with many quotations from writers of all classes. The Tropes against aetiology show us another side of the real Aenesidemus. In these, he displays his natural gifts, and seems a different man from the one who speaks in the Tropes of *epochê*. In the Tropes against aetiology we find the stamp

of his deep thought. These Tropes are based upon the strongest argument against the possibility of knowledge; namely, that phenomena can give us no cognizance of reality. They are given, with illustrations by Fabricius, as follows:

- I. Since aetiology, or the philosophy of cause, refers in general to things that are unseen, it does not give testimony that we can trust in regard to phenomena. For example, the Pythagoreans explain the distance of the planets from the world by a musical proportion.
- II. From many equally probable reasons which might be given for the same thing, one only is arbitrarily chosen. Some explain the inundation of the Nile by a fall of snow at its source, while many other causes would be equally plausible, such as rain, or wind, or the action of the sun.
- III. Things take place in an orderly manner, but causes are presented that do not show any order, as, for example, the motion of the stars is explained by their mutual pressure, which does not take into account the order that reigns among them.
- IV. Unseen things are supposed to take place in the same way as phenomena, as vision is explained on the same basis as the appearance of images in a dark room.
- V. Most philosophers present theories of aetiology which agree with their own individual hypotheses about the elements, but not with common and accepted ideas; as, for instance, the explanation of the world by an atomic theory like that of Epicurus; by *homoeomeriae*, after the manner of Anaxagoras; or by matter and form, according to Aristotle.
- VI. Theories are accepted which agree with individual hypotheses, and others equally probable are passed by. This is illustrated by Aristotle's explanation of comets, which is that they are a collection of vapors near the earth, because that coincided with his theory of the universe.

- VII. Theories of aetiology are presented which conflict, not only with individual hypotheses, but also with phenomena; as, for instance, the theory of Epicurus about the inclination or desire of the soul. This was incompatible with the world theory of necessity which he advocated.
- VIII. The inscrutable is explained by things equally inscrutable, as the rising of sap in plants by the attraction of a sponge for water, a fact which is even contested by some.¹

Aenesidemus said that if we could know that which is unknown, and if we could connect phenomena with a causal reality, we should then accept phenomena as signs of the unknown. This, however, we cannot do. We may accept phenomena as signs of each other, but we have no authority for going further.

The discussion regarding cause is closely connected with the consideration of the doctrine of signs, which plays so large a part in sceptical literature.

Aenesidemus said further, that phenomena, regarded as signs, may have a double significance. Phenomena as signs of other phenomena may act by suggestion.² Phenomena as signs of reality, a relation which exists metaphysically and not practically, can be only an indication. Smoke means fire: one sees smoke, and remembers a previous fire that went with the smoke, and considers smoke a sign of fire. This is the suggestion but there is no sign in either the smoke or the fire to reveal their ultimate cause. We may discuss the cause indicated, but it lies beyond us and we can never find it, however much we search for it.

The Pyrrhonists did not deny the possibility of laws of sense experience. The value of signs in seeking to understand phenomena, or what we call scientific research, is em-

phasized in medical books of the time of Aenesidemus and later. Aenesidemus accepted the possibility of a logical connection between cause and effect in nature as we know it, and the possibility of science, as applied to phenomena. We deduce from the Tropes against the philosophy of cause the idea that causality cannot be proved to be real, but is only a psychical conception. Causality, therefore, means to us something back of sense experience which is ultimate. The same arguments may be used against the theory of cause and of signs. Reality is an abstraction of which perceptions, as they are only relative, give us no conception. Science reveals no final truth, no cause in itself; the judgment is for us our only criterion.³ Quoting from Aenesidemus, "There are no known signs of the unknown causes and those who believe in their existence are the victims of a vain delusion."⁴ Sextus says, in his discussion of the Tropes of the philosophy of cause by Aenesidemus, that a theory of cause that would satisfy all the sects of philosophy, including the Sceptics, and would agree with experience as well is perhaps impossible, as we have no common link between phenomena and the unknown cause.⁵ We find, therefore, the conclusion drawn from these Tropes to be the same as that from the Tropes of *epochê*, i.e., the relativity of all things, and the fact that a criterion of knowledge has not been found.⁶ Nothing is in itself a cause or an effect, and each of the two is such only in reference to the other. The Tropes of aetiology were expressed consistently with the method of thought of the period in which they were written. They are a great contrast in that respect to the Tropes of *epochê*. The result was that they produced a more speculative tendency in the Pyrrhonic School. This was inconsistent with its sceptical aim, and had a strong influence on its later development.

CHAPTER XXIV

AENESIDEMUS AND HERACLITUS

The relation of Aenesidemus to Heraclitus has been widely discussed both in philosophic literature and philosophic congresses.

One of the greatest difficulties in explaining the philosophy of Aenesidemus is his apparent acceptance of the leading ideas of the Stoic Heraclitan physics. The difficulty is enhanced by the fact that Sextus Empiricus, who earnestly combats the Heraclitan views of Aenesidemus, nevertheless claims that he was the one man, next to Pyrrho, who had done the most for Pyrrhonism. The passage which has given rise to the greatest amount of controversy is in the first book of Sextus Empiricus' *Hypotyposes*.¹ "Aenesidemus and his followers said that the Sceptical School is the way to the philosophy of Heraclitus. They gave as a reason for this that the fact that contradictory statements seem to apply to the same thing leads the way to the belief that contradictory statements may really be true about the same thing, as the Heraclitans state." The connection which, according to Aenesidemus, exists between Scepticism and the philosophy of Heraclitus is objected to by Sextus. He says that Scepticism not only does not agree with the philosophy of Heraclitus, but teaches exactly the contrary. He says that the two attitudes of thinking are wholly inconsistent, as it is absurd to say that any school is a path to a sect with which it conflicts. There are other places in the

writings of Sextus Empiricus where Heraclitan doctrines are attributed to Aenesidemus. He is represented by Sextus as advocating a theory that the original substance is air, which was most certainly a positive statement, although a deviation from the teachings of Heraclitus. Sextus also quotes Aenesidemus as making statements about number and time and unity of the original world stuff, as well as about motion and about the soul.²

We have, therefore, two conflicting pictures of Aenesidemus. In one we see the man who first gave Pyrrhonism a position as an influential school, the compiler of the ten Tropes of *epoché*, and the author of the eight Tropes against the philosophy of cause. This man developed his Scepticism from the standpoint that neither the senses nor the reason can give us any certain knowledge of reality.³ He denied that the truth has yet been found, and taught the relativity of motion, of origin, and of decay. There was, according to his teaching, no criterion of pleasure, well-being, wisdom, or supreme good. He denied the possibility of finding out the nature of things, or of proving the existence of the gods, or discovering the standards of ethical aims.

The other picture is that of a man with a system of doctrines which leads, he says, to the philosophy of Heraclitus. The task of presenting any consistent theory of the development of thought through which Aenesidemus seems to have passed is a puzzling one. Is it possible to suppose that so sharp and subtle a thinker held at the same time such opposing opinions? Numerous explanations have been attempted of the apparent heresy of Aenesidemus regarding the Sceptical School. Many prominent writers on Pyrrhonism present ingenious and subtle theories to prove that Aenesidemus did not himself advocate the Heraclitan doc-

trines that are so widely attributed to him. The solution of this problem is not helped by the fact that Aenesidemus sometimes attributed doctrines to Heraclitus of which the latter never even thought. The question is, however, not whether Aenesidemus understood Heraclitus correctly or not, but rather whether he really accepted the positive statements which he quoted.

It did not seem to occur to many of the writers who sought to solve this problem that the simplest explanation is a psychological one, and that an acceptance of the facts as they are stated presents fewer difficulties than far-fetched explanations. In all that has been said on the subject there seems to have been only a partial conception of the way in which Heraclitan ideas were used in the age when Aenesidemus wrote. The best way to understand Aenesidemus' relation to the teachings of Heraclitus is to study the attitude of contemporary writers regarding this subject. We can then interpret his standpoint from the light thrown upon it by the literature of his own time, and not through the thought of a decidedly later period of Pyrrhonism. The writers who furnish the best illustrations of the close connection which was at that time thought to exist between Scepticism and the teachings of Heraclitus were Philo of Alexandria, Cornelius Celsus, and Plutarch. The agreement of the testimony of these three men is significant because they usually differed widely in philosophical opinions.

In Philo's book *On Drunkenness* we find, as has been previously said, one of the first illustrations of the literary use of Aenesidemus' Tropes.⁴

The one point of difference between the rendering of these Tropes by Philo and by Sextus Empiricus is that Philo has given them a peculiar Heraclitan coloring which

they lack in Sextus' text. In Sextus' time the Heraclitan elements had been separated, and were given independently of the Tropes.⁵ This Heraclitan attitude is found to a certain degree in Philo's whole work, but is shown definitely in his presentation of the sixth and eighth Tropes which dealt with the eternal flux and the agreement of opposites. These were the two most prominent Heraclitan doctrines of that time. In the sixth, we find the statement, "The sensible is never permanent, never fixed, but involved in eternal flux," and in the eighth, "It follows that nothing can be judged by itself, but only in comparison with its opposite." It is not only the fact that Philo states these doctrines that we must consider, but that he writes as if they were identical with sceptical theories. He does not refer to the "eternal flux" and "agreement of opposites" as if they were foreign elements, but he seems to take it for granted that they belong with the Tropes. In the time of Sextus such identity was impossible, and later copies of the Tropes did not contain Heraclitan ideas. Therefore, various copies of the Tropes may have existed which disagreed, and gave rise to an unnecessary controversy.⁶

We find a similar very marked Heraclitan character in the writings of Cornelius Celsus, and can understand from a study of his books what a strong influence Heraclitus must have had in medical circles. Celsus repeats again and again that nothing is permanent, all is in constant change, and, because of human weakness, must succumb to the eternal flux. He quotes from Heraclitus the saying, "*Perpetuum in omnibus non est*," in his medical teaching, to show that a new phase of life involved the death of the old. We find no less prominent in Celsus the doctrine of the identity of opposites. He gives this principle as a reason for resort-

ing to experiment. Celsus, as a Roman, could not have originated this Heraclitan outlook which is so pronounced in his writings, neither could it have originated in his time in Rome.⁷ He must have found it in a medical author who had used these principles before the time of Aenesidemus. The fact that the flux of Heraclitus was the leading idea in the theories of Celsus and ran through all the medical teaching of Empiricism is noteworthy. It was evidently the spirit of the age of Aenesidemus to be Heraclitan. The similarity of outlook of Aenesidemus, Philo, Celsus, and Plutarch is very strong. For even as late as the time of Plutarch, who was born about 50 A.D. there is the same curious identity of Scepticism with Heraclitan ideas. Plutarch makes similar references to the eternal change and agreement of opposites in nature as those we find in Philo and Celsus, and also speaks in the same way of the impossibility of knowing reality. His motive, as he states in the *E apud Delphi* is to arrive eventually at the truth. He says that it is natural to every one to seek knowledge and that Apollo himself, to increase the desire for truth, inspires doubts concerning human speculations. Indeed, to philosophize means to inquire, to wonder, and to doubt. Plutarch says that to find the truth is difficult, for we ourselves have no part in reality. All nature is in a state of constant change, and presents only illusions. He agrees with Heraclitus that it is never possible to step into the same river twice, neither is it possible to find life twice the same. Plutarch goes on to say that forces of nature which may be measured are in the same unstable condition as that which measures them, that nothing exists permanently, and all things are either being born or perishing, and in a constant state of change.

All three of these men were sincere in their desire to find

the truth, as was Aenesidemus who distinctly called himself a "seeker after the truth." It is evident that the Heraclitan influence did not exist in Aenesidemus' writings alone, for we find comparatively contemporary proof from these three authors that sceptical and Heraclitan trains of reasoning were associated together in their minds. Plutarch used this combination of ideas to lead the way to a better understanding of his neo-Pythagorean Platonism.

In Aenesidemus' quotations from Heraclitus, he was not conscious of contradicting his sceptical ideas, but was just speaking according to the custom of his time. In his search for truth he goes on to say that the conditions in the world of reality may be the same as those in the world of experience, but he does not make a dogmatic statement that they are the same. Aenesidemus, in considering the constant changes in nature, applied the idea of change to time also and made it a relative matter.⁸ That was again Heraclitan. The leading idea in the Tropes of *epochê* which Aenesidemus arranged, and in the Tropes on the philosophy of cause which he himself wrote, was the same, i.e., the idea of relativity. He applied it to both cause and time. The controversy has arisen because Aenesidemus is quoted as saying that the relativity which we discover in nature must be also a quality of reality. Although he may have said it, he evidently did not consider it inconsistent with his Scepticism.

It is supposed by some that the comparison of Scepticism to the teachings of Heraclitus quoted from Aenesidemus by Sextus Empiricus was contained in a separate book. Sextus introduces all such quotations from Aenesidemus by the words, "According to Heraclitus." These comparisons were probably not taken from the principal work of Aenesidemus, *Pyrrhonic Discourses*, which was the foundation of all the later development of Pyrrhonism.⁹

CHAPTER XXV

THE ECLECTIC SPIRIT OF AENESIDEMUS

Our analysis of the teachings of Aenesidemus seems to prove that he had as many positive ideas as sceptical ones. This double attitude was probably unconscious on his part. His theories reveal a systematic development that appears to be inconsistent with Scepticism. They do not, however, show a change of basis at any time in his life, and we may admit a gradual evolution of thought without supposing a decided change in philosophic standpoint. Aenesidemus' withdrawal from the Academy is an argument against rather than in favor of any new standpoint on his part, as it was caused by the changes which had taken place in the Academy. It seems evident that during the years between the time of Aenesidemus and Sextus, the basic idea of Scepticism was modified. An example of this change we find in the difference between the presentation of Scepticism by Diogenes Laertius and that of Sextus. The author whom Diogenes follows, probably one of the sceptical writers, considers Xenophanes, Zeno, and Democritus Sceptics, as well as many others, including Plato, Heraclitus, and Homer, and quotes sceptical sayings from the seven wise men. He speaks also of Euripides, Empedocles, and Hippocrates as Sceptics. He even says that Theodosius, probably one of the younger Sceptics, objected to the name Pyrrhonic on the ground that Pyrrho was not the first Sceptic.¹ Sextus, on

the contrary, calls no one a Sceptic who did not belong to the Pyrrhonic School.

We learn from many sources that before the time of Sextus, the Empirical School of medicine was considered identical with the Sceptical School of Philosophy. We do not find this to be the case in Sextus' writings. From all of these things we may infer a narrowing of the limits of Pyrrhonism in the time of Sextus. Aenesidemus was a Sceptic in the Academy. He left the Academy on that account, and he remained a Sceptic to the end, in so far as a man can be a Sceptic, and yet take the positive stand that he took. Two things might account for his apparent dogmatism:

- I. The eclectic spirit of his time.
- II. The psychological effect upon himself of his careful systematization of the sceptical teachings.

Aenesidemus was apparently one of the first to separate himself from the Academy and openly to emphasize a new movement. He wished to revive the older Scepticism as taught by Pyrrho and Timon, independently of the teachings of the New Academy. It was the spirit of his time to try to support all statements by the authority of as many as possible of the older philosophers. Therefore, we find him trying to prove that Scepticism leads to the philosophy of Heraclitus. It is not necessary to explain the matter away. History of thought gives abundant proof of the impossibility of a completely sweeping Scepticism, and of this Aenesidemus furnishes us with an example. He evidently gave the best efforts of his life to establish the Pyrrhonic School, and he was probably unconscious of the dogmatic tendency of his teaching. That he remained to the end a Sceptic is shown

by the fact that he was known as such by posterity. Nowhere do we find a change of basis attributed to him, and Sextus in refuting some of his statements does not, for that reason, question his Scepticism.

A second cause of Aenesidemus' positive teachings was the psychological effect upon himself of formulating sceptical beliefs. The work that he did for the Pyrrhonic School was a positive one. It occupied years of his life, and stamped itself upon his mental development. He formulated Pyrrhonism and maintained it against its many enemies, and this took place amidst all the excitement of the disruption in the Academy. In establishing a new movement, it was inevitable that his mind should take a somewhat positive direction. All attempts to systematize produce positive theories. This is illustrated even by Philo of Larissa who, according to Stobaeus, divided Philosophy into six parts, and who was apparently the first Sceptic in the Academy who tried to present Academic teaching as a historical whole. Aenesidemus remained a Sceptic as he had always been, but grew somewhat dogmatic in the process of arranging sceptical teachings. He was thus able to teach some of the doctrines of Heraclitus, notwithstanding their literal inconsistency with his alleged Scepticism.

A compiler like Sextus could easily point out inconsistencies which two centuries of the life of the school had revealed, but which were only a detail in the career of Aenesidemus. If we could read his original works, we should undoubtedly better understand his attitude. It is furthermore very probable that Aenesidemus himself could have explained the apparent disagreement in statements attributed to him; for it is not to be forgotten that on the ground of his criticism of aetiology alone, he must be con-

sidered the greatest thinker the Pyrrhonic movement had known since the age of Pyrrho, its founder.

In protesting against the changes in the Academy, Aenesidemus claimed that the true spirit of Pyrrhonism was of earlier origin than that of Academic Scepticism. The name of Socrates was all powerful in the Academy, but Aenesidemus, in quoting the philosophy of Heraclitus, goes back to the pre-Socratic tendency of sceptical thinking.

In his attempt to form a logical system of sceptical thinking, Aenesidemus bears a strong relation to Carneades. His dialectic method, as shown in the eight Tropes against aetiology, points to the influence of that great man, and forms the binding link between the Scepticism of the Academy and the New Pyrrhonism.

Aenesidemus belongs far more logically at the end of an evolution of living thought than at the beginning of later Pyrrhonism. He furnished the constructive elements which enabled Pyrrhonism to exist as a distinct movement for two centuries after his time. Scepticism, such as his, often prepares the way for logical methods of ethical teachings, as in the case of Carneades, or becomes an incentive to scientific research.

PART VI

PYRRHONISM IN ALEXANDRIA, ROME,
AND ATHENS

CHAPTER XXVI

PYRRHONISM FROM AENESIDEMUS TO SEXTUS

The polemic with the Stoics, so strong during the whole period of Scepticism, was vigorously continued by the Pyrrhonists from the time of Aenesidemus. This strife was increased by the widespread influence of Posidonius (131-51 B.C.), the great Stoic leader from Rhodes, whose voluminous writings were used as the point of attack of the Stoics in science, philosophy, and religion. The conflict between the two schools reached a high point in the century immediately succeeding the beginning of our era. Scepticism was then represented not only by the Empirical School of medicine, but also by that of the Methodics, which was founded by Themison in the time of Augustus. The latter was a modification of Empiricism. Its philosophical basis was sceptical and Sextus Empiricus considered it the most nearly allied to Scepticism of all the medical sects.¹ It was, however, somewhat under Epicurean influence. Soranos, previously referred to as one of the leaders in the Methodic movement, lived nearly a century later than the founding of the school. His influence was a strong factor in the rapid spread of sceptical teaching from that time onward. Soranos was originally from Ephesus, but lectured in Rome, and also in Alexandria where a branch of the Methodic School existed. He published many books, which were characterized by a real scientific spirit. He wrote in Greek, but

his works are for the most part lost; we know him somewhat, however, from the book on the Methodic science of medicine, by Caelius Aurelianus, who quotes him freely.²

In sharp opposition to the sceptical ascendancy of the Empirical and Methodic schools, a new medical school was founded, called the Pneumatic, especially allied with Stoicism. The leader in this Stoical movement was a certain Athenaeus, who had a large following during the latter part of the first century A.D. The fundamental doctrine of this sect was the Stoical teaching that the breath is the life principle. They applied this theory not only to philosophy but also to physiology, making it the basis of a physiological system. The Pneumatics emphasized the importance of diet, baths, and other practical forms of medical treatment in relation to the health of both body and soul. Physicians of this school made distinct advance in the knowledge and practice of surgery.³

The clashing of the different sects of philosophy and medicine was intensified by a second blossoming out of science in Alexandria, in the time of P. Claudius Ptolemaeus, probably from Upper Egypt, in the early part of the second century A.D. This great scientist was the most influential astronomer of ancient times, in conception as well as practice, with the solitary exception of his distinguished forerunner Hipparchus. He was not merely a scholar, but a master in mathematics, physics, and geography, and was surrounded by a group of congenial scientists. At this time, when Rome had become supreme in the civilized world, Alexandria was once more a center of learning. The rise of the new Dogmatic School and a new interest in research helped to bring about the prominence of the Pyrrhonists in public discussions during the first and second centuries A.D. A

characteristic of the period was the production of a multitude of books on all subjects. A. Cornelius Celsus wrote his history of medicine in the early part of the first century A.D. The work of Celsus, however, was far surpassed by that of Galen from a medical point of view. More than a century elapsed between them, as Galen wrote near the end of the second century A.D. His books include a voluminous collection on medical subjects, and embody the results of much original and valuable research, both observational and experimental. The work of Galen was characterized by many ingenious theoretical conjectures which, although they were derived for the most part from past speculations, served usefully to coördinate a very considerable wealth of positive knowledge. Meantime the philosophical attitude had changed. Medicine was still influenced by philosophy, but the power of Pyrrhonism had declined. While the books of Celsus showed a tendency toward Pyrrhonism, Galen's point of view was somewhat eclectic, although he was influenced by the Pneumatic School to some extent.⁴ As a consequence of the popular eclectic philosophical character of his writings, but also, fortunately, on his scientific merits, Galen stood second to Aristotle in controlling the thought of the Middle Ages; and even afterward, when his authority was broken by fresh researches undertaken during the Renaissance, his name was long revered. The eclectic spirit of Galen's work, which was tinctured more strongly by Stoic than by other theoretical conceptions, marks a final decline of Empiricism in medicine. Pyrrhonism as an organized movement came to an end about the time of Galen, and in both philosophy and medicine the strife between the Pyrrhonists and the Stoics was a thing of the past.

The decline of Pyrrhonism, although real, was very gradual during the second century A.D. Aenesidemus found professional philosophical successors in the Pyrrhonic School during more than two centuries, and his influence was strong among others than Pyrrhonists, for life in general is not divided into schools. His books formed the basis of later Pyrrhonism to the end of its history. They were supplemented by other writings, but never superseded by them, and were always considered the final authority in the movement.

Agrippa and the Five Tropes

There were men of influence among the Pyrrhonists after the time of Aenesidemus, besides those mentioned in the list of leaders. One of the most important of these was Agrippa. His date cannot be accurately fixed, but was probably about 40-70 A.D. He was the author of an abridged and systematized exposition of Tropes of *Epoché*.

Sextus attributes these Tropes to the "later Sceptics," and does not mention their author. Diogenes, however, ascribes them to Agrippa, but gives us no further information concerning him. He must have had disciples, for Diogenes speaks of "the followers of Agrippa." Another Sceptic called Apellas, a man unknown from other sources, named a book after him.⁵

The influence of Agrippa in the development of Pyrrhonism was great, for the transition from the empirical Tropes of the "older Sceptics," to the five attributed to Agrippa is marked, and shows the entrance into the school of a logical power previously unknown to it.

It is a well-known historical fact that a remarkable trans-

formation of all schools of philosophy took place in the period just before and after the Augustan age. It was at this time that those who were called "The Modern Thinkers" appeared in connection with philosophic thought. In this general change of outlook, the Pyrrhonic School participated. The five Tropes of Agrippa are not a reduction of the Tropes of Aenesidemus, but are written from a wholly different point of view. The former furnish objective proofs of the foundation theories of Pyrrhonism, while the latter are rules of thought leading to logical proof, or laws for the ten earlier Tropes.⁶ We find this distinction illustrated by the different way in which the Trope of relativity is treated in the two groups. In the first, it points to an objective relativity, but with Agrippa, its application is altogether subjective. The originality of the Tropes of Agrippa lies in the method by which they were applied, for they were not new in thought, having been in use in all the older philosophic teaching. What Agrippa did was simply to make them into paragraphs, and apply them to Pyrrhonism. The *regressus in infinitum* was familiar to the earliest dialecticians. The *relativity* goes back to Protagoras. The *circulus in probando* was used by Aenesidemus, and even by Timon. The ten Tropes of Aenesidemus were used for the contents of all knowledge, and the five Tropes of Agrippa apply more directly to form and method. The five Tropes are as follows:

- I. The one based upon discord.
- II. The *regressus in infinitum*.
- III. Relation.
- IV. The hypothetical.
- V. The *circulus in probando*.

The first and the third of these were taken from the old list. In the opinion of Sextus, the five Tropes were intended to supplement the ten Tropes, in order to furnish variety in the way of meeting the arguments of the Dogmatics.⁷

The order of these Tropes is the same with Diogenes as with Sextus, but the definition of them differs sufficiently to show that the two authors took their material from different sources.

These Tropes can be explained as follows: According to the first, the validity of any statement depends on the testimony of the senses, or on the reason, or on both combined. In attempting to estimate its value, either practical or philosophical, a state of discord is developed in which it is impossible to reach a conclusion. According to the second Trope, every apparent proof requires another proof, and so on to infinity; and there is no standpoint from which to begin the reasoning. According to the third, all perceptions are relative, as the object is colored by the mind of the thinker, and the influence of his environment. According to the fourth, it is impossible to escape from the *regressus in infinitum* by beginning with something not founded on the reason, but which is taken for granted without proof, according to the method of the Dogmatics. In the fifth, the *circulus in probando* arises when that which should be the proof needs to be sustained by the thing to be proved. As we are unable to take the one for the proof of the other, we must suspend the judgment regarding both.

Sextus claims that all knowledge comes under these Tropes, whether pertaining to the senses or to the reason. Some say that only sense perception gives us the truth; others claim that the truth is found by reasoning; still oth-

ers claim that the truth may be found both by sense perception and by reasoning. In any case discord arises, as we have neither a criterion of sense perception nor of the reason. In all cases any criterion proposed would require a proof of its infallibility. Accordingly, the result of all reasoning must be either hypothetical, or fall into the *regressus in infinitum*, or the *circulus in probando*.

The reference to some who say that only the things of sense are true, is evidently to Epicurus and Protagoras; to some, that only the things of thought are true, to Plato; and to those that claimed some of both to be true, to the Stoics and Peripatetics.⁸

The three Tropes added by Agrippa do not refer to sense perception, but bear entirely upon methods of reasoning. In this respect they form a contrast to the earlier Tropes which related almost entirely, with the exception of the tenth, to objective knowledge. Sextus claims that these five Tropes lead to the suspension of the judgment, but their logical result is rather in the direction of denying the possibility of knowledge. They are more in the spirit of the Academy, than in that of the Pyrrhonic School.⁹ The ten Tropes claim to establish doubt in regard to knowledge of ultimate truth, but the five Tropes of Agrippa aim to prove logically the impossibility of such knowledge. It is strange that the later Pyrrhonists did not perceive this decided contrast in the attitude of the two sets of Tropes. Sextus expresses his approval of the Tropes of Agrippa and, in his reasoning, makes more frequent use of the fifth of these, *The Circulus in Probando*, than of any other argument.¹⁰

We thus find in Pyrrhonism, shortly after the time of Aenesidemus, the same tendency to dogmatic teaching as that of which the Middle Academy was accused in its later his-

tory, and which was one of the causes of its change to eclecticism. The Tropes of Agrippa show progress in the development of logical thought. They unify the Pyrrhonic system and place its reasoning on the basis of the laws of thought and reduce the amount of material necessary to be used. In that sense Agrippa made an important contribution to the organization of Pyrrhonism. Nevertheless, the Tropes of Agrippa were not in harmony with the true spirit of Pyrrhonism, and it was through the very tendency shown in accepting them that the School finally lost the strength of its original position.

Another Pyrrhonic leader, or writer, reduced the five Tropes of *epochê* formulated by Agrippa to two. We have no hint of the authorship of the two Tropes, but they have been attributed to Menodotus by most writers on Pyrrhonism.¹¹ They are founded on the principle that truth must be known either through itself, or through something else. It cannot be known through itself, because of the discord between sense perception and reason. It cannot be known through something else, as then either the *regressus in infinitum* or the *circulus in probando* follow.

In regard to all the Tropes of *epochê* Sextus has truly said, that they are included in the eighth of the first group, or that of relativity, the most important principle of Pyrrhonism.¹²

Menodotus of Nicomedia (70-150 A.D.)

Menodotus of Nicomedia was president apparently of the Pyrrhonic movement. He was in any case one of its most prominent leaders, between the time of Aenesidemus and Sextus. He was a physician of renown, and he is the first Pyrrhonic president who, being formally spoken of as be-

longing to the empirical sect, thus represented the definite alliance between Pyrrhonism and Empiricism.¹³ We get our knowledge of Menodotus chiefly from Galen, who refers to him often as one of the leaders of the Empiric School, and constantly quotes from his books.

It is interesting to note that Menodotus came from Nicomedia, only a few hours distant, by sail, from Chalcedon, where Timon spent a period of years. Nicomedia is on a branch of the Propontis on the shore of which Chalcedon also lies. Galen, who is the chief authority for our knowledge of Menodotus, came from Pergamus, which was in Asia Minor not far south of Nicomedia.

In his writings Menodotus originated some of the nomenclature of Pyrrhonism. He wrote a history of medical Empiricism, but it is not known how exhaustive a work it was.¹⁴ In the long continued conflict with the Stoics he was one of the most prominent, and his attacks upon them were said to be of quite a violent character. In his time the influence of Heraclitan thought was weakening in the Pyrrhonic School, and he did not directly teach the doctrine of change as one of the sources of knowledge. A certain Pyrrhonist named Cassius, however, wrote a book to prove that Menodotus upheld this doctrine of transition. He taught, as did other Empiricists, that speculation should be shunned, as the cause of hasty conclusions, and syllogistic doctrines. He also taught that the Sceptic, especially one who is an empirical physician, should not join in long dissertations, but should show his greatness through his work. Menodotus maintained strongly the superiority of the Pyrrhonic School over Scepticism in the Academy. He criticized the Academy for accepting the theory of probability. He claimed that no true Sceptic could regard one concept as more probable than another, and he asserted that the only real Scepticism was that

taught by Pyrrho and Timon and brought again into prominence by Ptolemy of Cyrene.¹⁵ Menodotus, as far as we know, was at the head of Pyrrhonism in the city of Alexandria. It was in that city that he sought to perfect its doctrines, and he was doubtless one of the greatest leaders who gave Pyrrhonism the *éclat* which it attained there.¹⁶

Favorinus, the Academician (80-150 A.D.)

The Scepticism of Aenesidemus had a strong influence outside his own school, and his philosophical attitude helped to bring about the eclecticism that prevailed in later times.¹⁷ One of the best illustrations of this we find in Favorinus, the philosopher, rhetorician, and historian, a contemporary of Menodotus.

Favorinus came from Arelatum, or Arles, in the delta of the Rhone, where there was a Roman colony, but he spent some time in Greece and Ionia where the best teachers of rhetoric were then found. He finally resided in Rome where he had a house and a library. He was an intimate friend of many of the leading thinkers of his era, especially of Plutarch, and was highly regarded by the Emperor Hadrian. A statue was erected in his honor in Athens. Through the influence of Plutarch, he became a member of the Academy, of which Plutarch was at that time a leading representative. Notwithstanding his connection with the Academy, his world theory was decidedly that of a Sceptic, and he practised the principle of *epoché* in all his thinking. He based this principle not so much on the old arguments of the Academy, as on the general basis of the relativity of knowledge. Favorinus gives the ten Tropes of Aenesidemus in his writings, and is quoted by Diogenes in regard to their

order. He made a comparison between Academic and Pyrrhonic Scepticism, claiming that their resemblance to each other was strong, and that their attitude towards doubt in general and suspension of the judgment was the same. He defended the Pyrrhonists against the old accusation that their theories unfitted them for practical life. He admitted, however, that, in recognizing the theory of probability as a basis of knowledge, the Academy laid itself open to the accusation that it was in that respect quasi-dogmatic, and added that Pyrrhonism accepts no probable basis for knowledge.

Favorinus wrote many books, the most important of which were *Memoirs of the Philosophers* and *General History*.

These works were encyclopaedic in character and formed one of the principal sources of Diogenes Laertius and Aelian, and were used by Athenaeus and Clement of Alexandria. Suidas calls him "learned in all kinds of knowledge," and he is said to have shared the opinions of Aenesidemus.¹⁸

Theudas of Laodicea (Date Uncertain, about 150 A.D.)

Theudas, or Theodas, a younger contemporary of Menodotus, was the next leader of the Pyrrhonic School. He was a physician from Laodicea, and was considered an authority in empiric Scepticism, being frequently quoted by Galen. He emphasized the importance of research, advocated studying the history of science, and urged observation of the changes that take place in similar things as sources of knowledge. He was one of the writers of the empiric medical sect. Two of his books were *The Introduction* and *The Principal Points*.¹⁹ He also wrote upon the manner of performing experiments.

Theudas divided medical science into three general sub-

jects — signs, cures, and health — so that he is said to have taught a doctrine of parts. He also claimed that the function of the reason is important in medical experience.²⁰ He stands as one of the more conservative Pyrrhonists, accepting the value of signs, the doctrine of transition in similar things, and the importance of the reason.

Herodotus of Tarsus

Herodotus of Tarsus, who followed Theudas as president of the Pyrrhonic School, was not definitely called a physician. It is not certain who this Herodotus, the master of Sextus, was. He seems to have little reason to stand in this list, except that he was officially the president of the Pyrrhonic School. He is probably the same Herodotus, who lived in Rome, the son of Arieus of Tarsus, whom Galen mentions frequently. According to Galen he denounced all medical sects except the Pneumatic.

The real power in the whole Pyrrhonic movement after its reorganization was Aenesidemus. His influence as a great thinker and writer was felt not only by his contemporaries but by all who followed him.

It is impossible to determine the exact order of succession of the different presidents.

The list of leaders of the Pyrrhonic School after Aenesidemus is given by Diogenes as follows: Zeuxippus, Zeuxis, Antiochus, Menodotus, Theudas, Herodotus, Sextus, and Saturninus. The exact chronology of this succession is impossible to determine. Supposedly, Aenesidemus was in his prime about 85–65 B.C., and Pyrrhonism came to an end about 200–210 A.D. This would give an unusually long time of office to each leader but it is probable that Diogenes omitted some names from his list. Five, at least, of those whose

names are given are known to have been physicians. Of Zeuxippus Polites we know practically nothing. Polis was either in Locri or in Egypt. *Polites* may mean, however, that he was from Alexandria. He wrote a book on *Twofold Arguments*. According to Diogenes, Zeuxis Goniopus was a friend of Aenesidemus. Galen refers in several different places to a certain Zeuxis from Tarent as one of the early followers of Hippocrates, and in one instance he combines his name with that of Heraclides, and calls them "The Empirics."²¹

Supposing that Diogenes omitted from this list of Pyrrhonic leaders the names of Agrippa, and possibly Apellas, this chronology would meet the demands in regard to the date of Aenesidemus better than if Zeuxis came at a later date, and would still allow us to make Sextus Empiricus a contemporary of Galen, which we shall endeavor to demonstrate later was the case. Of Antiochus of Laodicea, the next leader, we know very little.²²

CHAPTER XXVII

SEXTUS EMPIRICUS, THE HISTORIAN OF PYRRHONISM

Sextus Empiricus was the last of the Pyrrhonic writers. His importance lies in the fact that he has given us the tradition of Greek Philosophy before his time in a remarkable manner.

It is sometimes said that his books have survived just by chance, while other far more valuable works of antiquity have been lost. Such a statement can hardly be justified, as we can only judge the books that have been lost by quotations from them found in other writings.

Sextus was a prolific writer, and his works abound in contradictions of which he himself seems unconscious. They furnish us, however, with a complete presentation of Pyrrhonism, together with important data by which to judge of many disputed philosophic problems. Interest has revived in Sextus Empiricus in recent times; especially, one may say, since the time of Herbart, since there is much in the teachings of Pyrrhonism, as illustrated by its strongest thinkers, that finds a parallel in the methods of modern thought. There are many details of the life of Sextus Empiricus which are interesting from the light which they cast on the history of Pyrrhonism.

The Life of Sextus Empiricus

It is impossible to estimate correctly the work of any writer without a knowledge of the environment in which he

lived and wrote. To rightly understand the influence of Sextus Empiricus in the Pyrrhonic School, and to comprehend the standpoint from which he regarded philosophic questions, we should be familiar with the leading details of his life, the place of his birth, the country in which he taught, and the general aim and character of his work. Here, however, we encounter great difficulties, for although we possess most of his writings, well preserved, the evidence which they provide on the points mentioned is very slight. He does not give us biographical details nor does he refer to his contemporaries in a way to afford any exact knowledge of them. We know from his own testimony that he was a physician. In one case he uses the first person for himself as a physician, and in another he speaks of Aesculapius as "the founder of our science." All his illustrations show a breadth and variety of medical knowledge that only a physician could possess.¹ He published a medical work which he refers to once as *Medical Memoranda*, and again as *Empirical Memoranda*. Unfortunately for the solution of the difficult question that we have in hand, this work is lost and nothing is known of its contents, except in so far as they are found in his other works.²

Even the name of Sextus Empiricus furnishes us with a problem impossible of solution. He is called "Sextus the Empiric," by Diogenes Laertius, who goes on to say that "Sextus was the master of Saturninus, who was also an Empiric." Other evidence is not wanting that Sextus bore the surname "Empiricus." Fabricius, in his edition of Sextus' works, quotes from the *Tabella de Sectis Medicorum*, of Lambecius, the statement that Sextus was called Empiricus because of his position in medicine. Pseudo-Galen also refers to him as one of the directors of the Empiric School, and

calls him "Sextus the Empiric." His name is often found in the manuscripts written with the surname, Empiricus. In other places it is found written without the surname, as, for instance, in some of the writings of Fabricius where Sextus is mentioned as a Sceptic in connection with Pyrrho.

The confusion in regard to the name arises from Sextus' own testimony. In the first book of the *Hypotyposes* he takes strong ground against the identity of Pyrrhonism and Empiricism in medicine. Although he introduces his objections with the admission that "some say that they are the same," he goes on to declare that "Empiricism is neither Scepticism itself, nor would it suit the Sceptic to take that sect upon himself." He gives as the reason that Empiricism positively maintained the impossibility of knowledge. He said that he would prefer to belong to the Methodic School, which was the only medical school worthy of the Sceptic. To quote: "For this alone of all the medical sects does not proceed rashly, it seems to me, in regard to unknown things, and does not presume to say whether these can be understood or not, but is guided by experience." "It will thus be seen that the Methodic School of medicine has a certain relationship to Pyrrhonism which is closer than that of the other medical sects."³ In apparent contradiction, however, to his statement in *Hypotyposes* I, that Pyrrhonism and Empiricism are opposed to each other, Sextus, at another time, classes the Pyrrhonists and Empiricists together, as having the same standpoint regarding knowledge. In another passage, he contrasts the Pyrrhonists sharply with the Empiricists and accuses the latter of making a statement which could not be proved.⁴

The question is, therefore, did Sextus belong to the Em-

piric or the Methodic School of medicine? His strong expression in favor of the Methodic School, and also many of his medical opinions, point to his association with that school. Yet the greater part of the evidence at hand sustains the opinion that he was an empiric physician.⁵ He is called one of the leaders of Empiricism by Pseudo-Galen, and his only medical work bore the title of *Empirical Memoranda*. His comparison of the Empiric and Methodic schools does not necessarily mean that he himself was not an Empiricist. Sextus was more of a Sceptic than a physician. That he criticized the Empiricists is certain, but only in respect to their not having a logical sceptical standpoint.⁶ The difference between the two schools was a small one, and consisted more in philosophic theory than in medical practice. Even if Sextus was, during the earlier part of his life, a physician of the Empiric School, it may be that he was not named Empiricus for that reason. There is one instance in ancient writings where Empiricus is used as a simple proper name, as it may have been in Sextus' case. Perhaps his name came from the title of his book, *Empirical Memoranda*.

Sextus is known to the world principally as a Sceptic, and was classed in later times with Pyrrho. His philosophical works survived, while his medical writings, which are chiefly known from his own mention of them, did not. The passage regarding the Empiric School, previously referred to, i.e., "Nor would it suit the Sceptic to take that sect upon himself," may be explained by supposing that Sextus was an Empiricist part of his life, and afterwards found the Methodic School more to his liking. Such a change would not in any way have affected his standing as a physician.

When Did Sextus Empiricus Live?

As to the exact time when Sextus Empiricus lived, we gain very little knowledge from internal evidence. The time of Diogenes Laertius is usually estimated as the first half of the third century A.D., and he mentions Saturninus, the follower of Sextus, as an Empiric physician,⁷ which would indicate that Sextus probably lived about a generation earlier. Sextus directs his writings entirely against the Stoics, and the influence of the Stoics began to decline in the beginning of the third century A.D. A fact often used as a help in fixing the date of Sextus is his mention of Basilides, the Stoic.⁸ This Basilides was supposed to have been one of the teachers of Marcus Aurelius, but there are so many difficulties in identifying the Basilides of whom Sextus speaks that this reference affords us no help. Even if he was the teacher of Marcus Aurelius, this shows merely that Sextus lived either at the same time as Marcus Aurelius, or after him. Another reason for reaching the same conclusion is that Galen mentions several Pyrrhonists who were physicians of the Empiric School, and often speaks of Herodotus, supposed to be identical with the teacher of Sextus, but makes no reference whatever to Sextus. As Galen's time passes the limit of the second century A.D., we must either infer that Sextus was not the well-known physician that he was stated to be by Pseudo-Galen (and consequently not known to Galen), or that Galen wrote before Sextus became prominent as a Sceptic.⁹

The question is made more complicated by the difficulty in fixing the identity of the Herodotus often referred to by Galen. The latter was a Dogmatic, and belonged to the Pneumatic School. It is not reasonable therefore to suppose that he was the same as the Herodotus whom Sextus called

his teacher. As Galen died about 200 A.D., at the age of seventy, we should fix the date of Sextus early in the third century and that of Diogenes perhaps a little later than the middle, were it not that early in the third century the Stoics began to decline in influence, and could hardly have excited the warmth of animosity displayed by Sextus. We must conclude, then, that Sextus wrote during the last years of the second century, and either that Galen did not know him, or that Galen's books were published before Sextus became prominent as a physician, or as a Pyrrhonist. The fact that he may have been better known as a Pyrrhonist than as a physician does not sufficiently account for Galen's silence, as other Pyrrhonists of less importance than Sextus are mentioned by him. Sextus, even if not as great a physician as Pseudo-Galen asserts, was certainly both a Sceptic and a physician, and must have belonged to one of the two medical schools so thoroughly discussed by Galen — either the Empiric or the Methodic. Therefore, if Sextus were a contemporary of Galen, he was so far removed from the circle of his acquaintances as to have made no impression on him, either as a Pyrrhonist or as a physician, a supposition that is very improbable. We must then fix the date of Sextus late in the second century, and conclude that the climax of his public career was reached after Galen had finished those of his writings which are still extant.

Taking into consideration all of the testimony, it is evident that Sextus must have died before 220 A.D.¹⁰

Of What Country Was Sextus a Native?

Sextus has a Latin name, but he was a Greek; we know this from his own statement.¹¹ We also know that he must

have been a Greek from his natural use of the language, and the facility of his style, and from his acquaintance with Greek dialects. The place of his birth, however, can only be conjectured from arguments indirectly derived from his writings. His constant references throughout his works to the minute customs of different nations ought to give us a clue, but, strange to say, they do not furnish a decided one. Of these references, a large number relate to Libya, showing an intimate knowledge of the political and religious customs of that land, such as he displays in regard to no other country except Egypt.¹²

Fabricius thinks that Libya was not his birthplace, because of a reference which he makes to it in the *Hypotyposes* — explaining who the Libyans were. This conclusion is, however, entirely unfounded, as the explanation of Sextus simply shows that the people whom he was then addressing were not familiar with the people of Libya.

Suidas speaks of two men called Sextus, one from Chaeronea, and one from Libya, both of whom he calls Sceptics, and to one of whom he attributes Sextus' books. Although all authorities agree that great confusion exists in the works of Suidas, it is unreasonable to suppose that this confusion could go as far as to attribute the writings of Sextus Empiricus to Sextus of Chaeronea, and also make the latter a Sceptic. It is far more reasonable to accept the testimony of Suidas, that Sextus Empiricus came from Libya, especially, as it coincides so well with the internal evidence of Sextus' writings in regard to his native land. It is, nevertheless, evident from his familiarity with the customs, languages, and laws of Athens, Alexandria, and Rome, that he must have resided at some time in each of these cities.

CHAPTER XXVIII

THE PHILOSOPHICAL ACTIVITIES OF SEXTUS EMPIRICUS

In What City Was Sextus President of the Pyrrhonic School?

Of all the problems connected with the historic details of the life of Sextus, the one that is the most difficult of solution is to fix the seat of the Pyrrhonic School during the time that he was its president. It is necessary to know this, as the place where Sextus taught is an important item in a critical study of his work and influence. The *Hypotyposes* are lectures which were delivered in public, by him, as President of the Pyrrhonic School. But where were they delivered?

Up to the time of Sextus the history of Pyrrhonism is plain. Pyrrho, the founder of the school, as we know, taught in his native village, Elis; but even as early as the time of Timon, who directly succeeded him, his teachings were somewhat known in Alexandria, where Timon spent a short time.¹ The immediate disciples of Timon, as given by Diogenes, were not men known in Greece or mentioned in Greek writings, but came from different parts of the Near East, and often drifted to Alexandria as that city became more and more a popular center of learning. We have the testimony of Aristocles, the Peripatetic, in regard to Aenesidemus that he taught Pyrrhonism in Alexandria.² It was in the time of Antiochus and his followers, after the eclectic tendency of the Academy had weakened its Scepticism that Aenesidemus

taught in Alexandria, and organized Pyrrhonism in that city. His followers are spoken of in a way that presupposes their continuing in the same place.

There is every reason to think that the connection of Sextus with Alexandria, which had long been the seat of Pyrrhonism, was an intimate one. Internal evidence of Sextus' writings, as well as their subsequent historical influence point to that conclusion. The *Hypotyposes*, however, could not have been delivered in Alexandria, as he often referred to Alexandria in comparison with the place where he was then speaking. He says, furthermore, that he taught in the same place as his master.⁸ This makes it evident that the school must have been removed from Alexandria to some other center in or before the time of Herodotus.

The *Hypotyposes* are, from beginning to end, a direct attack on the Stoics; therefore, Sextus must have taught in some city where the Stoic influence was strong. The *Hypotyposes* show also that the writer had access to some large library. Alexandria, Rome, and Athens were the three places where such libraries were to be found. For whatever reason the seat of Pyrrhonism was removed from Alexandria, where it had been so long united with the Empiric School of medicine, by the master of Sextus, or by himself, Athens would seem to have been the most suitable city for its new site, in the land where Pyrrhonism had its birth. Sextus, however, in one instance, referring to things not in sight, says in illustration, "as the city of Athens is invisible to us at present."⁴ In other places also he contrasts both the Athenians and the Alexandrians with the people whom he is addressing, which proves that he was neither in Alexandria nor Athens at that time. There are many reasons for thinking that the lectures in the *Hypotyposes* were delivered in Rome. They must

have been given in some center of philosophical learning, and he never opposed Roman relations to those of the place where he is speaking, as he did those of Athens and Alexandria. He used the name "Romans" only three times, once comparing them to the Rhodians, once to the Persians, and once to other nations in general. In the first two of these references, the expression "among the Romans" is followed by the expression, "among us," which seems to be synonymous. The third reference is in regard to a Roman law, and in this case the use of the word "Roman" does not signify. The laws referred to by Sextus as "belonging to us" were Roman and hence would suggest that he was speaking in Rome. This argument might apply to any part of the Roman Empire, but the whole relation of law to custom as treated by Sextus, and all his statements of customs forbidden by law at that time, point to Rome in particular as the place of his residence.⁵ Further, the Herodotus mentioned by Galen as a prominent physician in Rome was probably the predecessor and master of Sextus, in whose place Sextus says that he is teaching.⁶ Sextus' refutation of the identity of Pyrrhonism with Empiricism is thought by some to be in response to a paragraph in Galen's *Subfiguratio Empirica*.⁷ This would be natural if the lectures in the *Hypotyposes* were delivered shortly after that work was published and in the same place. Hippolytus, who wrote in or near Rome very soon after the time of Sextus, apparently used as a reference the *Hypotyposes* of Sextus Empiricus. There is much, therefore, in internal and external evidence to show that Sextus was at that time speaking in Rome.

May we not conclude from the data at our command that during the years that the Pyrrhonic School was away from

Alexandria its headquarters were in Rome, and that the *Pyrrhonic Hypotyposes* were delivered in Rome?

Pyrrhonism was not entirely unknown in Rome. It received some attention even before the time of Sextus. This is shown by the teachings of Favorinus, and by medical literature of that era.

There is also the fact that the Pyrrhonic Tropes play an important part in the writings of Lucian, especially in the *Hermotimus*. The greater part of the arguments used in *Hermotimus* rests upon three of the five Tropes of Agrippa. Although Lucian does not mention the name of Sextus, there are many striking resemblances in this work to his writings, and frequent reference to the ten Tropes of *epochê*. There must have been a widespread knowledge of Pyrrhonism in the Roman literary world.⁸

Sextus' frequent reference to Aesclepiades, whom he mentions more than ten different times by name, speaks in favor of Rome in the matter under discussion, as Aesclepiades made that city one of the centers of medical culture.⁹ The two reasons for removing the school temporarily to Rome were the difficulty with the Empiricists, referred to in the first book of the *Hypotyposes*, and also in order to be able to attack the Stoics in their principal stronghold.

Pyrrhonism, however, could not have been permanently established in Rome, where Stoicism was the favored philosophy of the Roman emperors. It could have found no foothold.¹⁰ There is every reason to think that the permanent seat of the school was somewhere in the Greek world. The name of Sextus is comparatively little known in Roman literature, while in the Greek, on the contrary, writers speak of him and of Pyrrho for centuries after his time, and references to the *Hypotyposes* and other books of Sextus fre-

quently occur in philosophic and religious writings of the Greek world. The Emperor Julian is thought to have made use of the works of Sextus, and the attitude of the Church Fathers toward him is well known.¹¹ It is a logical inference that the seat of Pyrrhonism, after the Roman interlude, was in some prominent city of the East, probably in Alexandria itself. This would not prevent the conclusion that Sextus taught both in Rome and other places. There is nothing to point to the removal of the school from Alexandria before the time of Menodotus, who was the teacher of Herodotus, and for many reasons to be considered the real teacher of Sextus.¹² It was Menodotus who perfected the empiric doctrines, and who emphasized the official union between Pyrrhonism and Empiricism, and who gave Pyrrhonism, in great measure, the *éclat* that it enjoyed in Alexandria. He appears to have been the most powerful influence in the school from the time of Aenesidemus to that of Sextus.

Sextus' familiarity with Alexandrian customs is borne out in his writings. Some of his books may have been written in Alexandria, as, for example, *Against the Natural Philosophers*.¹³ If this book was composed of lectures delivered in a school, it would be evidence that Sextus taught in Alexandria as well as elsewhere. The history of eastern literature for the centuries immediately following the time of Sextus shows many instances of the influence of Pyrrhonism, and also a knowledge of the *Hypotyposes*. Thus we find incontestable proof that the Pyrrhonic School could not have been long away from the East. It probably came to an end in Alexandria about fifty years after the time of Sextus. From that center his sceptical works had their widespread influence in the East.

The Writings of Sextus Empiricus

The books of Sextus Empiricus furnish us with the best and most complete presentation of ancient Scepticism that has been preserved to modern times. Those extant are the *Pyrrhonic Hypotyposes* in three volumes, and the two works comprising eleven books which were later united under the title *Against the Mathematicians*, although this title really belongs to only one of them. Originally there were probably only ten of these books, as the one against the geometricians, and the one against the arithmeticians, which is very short, evidently formed one book. *Against the Mathematicians* has six divisions: "Against the Grammarians," "the Orators," "the Geometricians," "the Arithmeticians," "the Astrologers," and "the Musicians." *Against the Dogmatic Philosophers* contains five divisions, two of which are "Against the Logicians," two "Against the Natural Philosophers," and one "Against the Teachers of Ethics, and Their System of Morals."

It would seem that these works were composed in the following order: First, the *Hypotyposes*, second, the work against the Philosophers, and, third, the one against the Mathematicians. This is the order which Sextus himself gives¹⁴ and it is also the order which Bekker follows in his edition of the works of Sextus.

In addition to the works just alluded to, Sextus mentions in his writings the titles of several others, namely, *Disputations*, *First Principles*, *Sceptical Memoranda*, *The Sceptics*, *The Sceptical Movement*, and *The Teachings of Pyrrhonism*. Quotations from these are found in his larger works, and it is thought that these titles are the subjects of lectures. Some of the works of Sextus have apparently been lost alto-

gether. They are *Medical Memoranda*, *Empirical Memoranda*, previously mentioned, and *About the Soul*. The first two titles probably belong to the same book.

The *Pyrrhonic Hypotyposes* gives, especially in the first of the three volumes, the most complete summary known of the teachings of Pyrrhonism and its relation to Academic Scepticism and to other schools of philosophy. There is no question as to the chief source of this work, which was the book of the same name by Aenesidemus. The comprehensive title, *Pyrrhonic Sketches*, or *Pyrrhonic Hypotyposes*, was very probably a general expression used to designate courses of lectures given by other leaders of the Pyrrhonic School, as well as by Sextus. A comparison of Sextus' work with the similar one by Aenesidemus, as given by Photius, shows that the same problems were treated by the two writers, but with notable differences, indicating changes in the Pyrrhonic teachings between the time of Aenesidemus and that of Sextus. The real teacher of Sextus was Menodotus, although he is given no credit for his influence on the writings of Sextus. The new method of reasoning which characterized the last period of Pyrrhonism was without doubt due to him. We may attribute to him the systematic development of the practical inductive method in accordance with Pyrrhonic principles.

In general, the works of Sextus offer an exhaustive repertory of the arguments used by the Pyrrhonists in their controversies with other schools of philosophy. The author seems so much afraid that some small detail will be omitted, that he constantly repeats and reiterates the same statements.¹⁵

Sextus' style is fluent and his Greek reminds us of two very different authors, belonging to different periods of Greek

literature, namely, Thucydides and Plutarch. His originality does not consist in the subject matter, as his books are largely compilations. Authors of the age of Cicero and later were not always careful to notice even if contradictions occurred in the profuse quotations which they made from various writers. While Sextus' work was based principally on the writings of Aenesidemus, he used the works of other authors freely, especially those of Menodotus. He quotes almost entirely from comparatively contemporary writers. He must have possessed the writings of Aenesidemus intact, as the books of the latter were well known as late as the ninth century A.D. Aenesidemus had a great advantage over Sextus as an author on Pyrrhonism. He had received the scholarly training of the Academy, and he wrote two centuries earlier. In his day the large collection of authorities in the Alexandrian library was more nearly complete. In addition to using the books of Aenesidemus, Sextus borrowed freely from the Stoic writings, especially from the voluminous works of Posidonius. He does not quote directly from Plato and Aristotle. There are, however, some exceptional passages which give evidence of an older origin: *Hypotyposes*, II, 219-27, furnishes an instance of this kind. In the same chapter a quotation occurs from Chrysippus, which may also be old.

It is impossible to name all the writers from whom Sextus borrowed, as he himself does not give them credit for the opinions which he quotes, unless he makes a distinct attack upon them. Among those, however, whose writings he uses as sources, were Heracleon, the grammarian, from Heracleopolis in Egypt, who taught in Rome in the first century A.D., and Dionysius of Alexandria, who taught in Rhodes in the latter half of the first century A.D. Heracleon's textbook on grammar was the principal authority on that subject for

many years, and had great influence on the style of the Stoics. Sextus took this book as the foundation of his work, *Against Grammar*. The *Vetusta Placita* were also used to good purpose by Sextus, from which he quotes the opinions of the philosophers in general, and also those of many physicians.¹⁶ Sextus made extensive and valuable use of the *Silli* of Timon as quoted by later authors.¹⁷

Although Sextus does not claim originality, but presents, in all cases, the arguments of the Sceptic, he was original in the highest sense. The illustrations and the form in which the arguments are presented bear the marks of his own thought. They are also characterized here and there by a wealth of humor that has not been sufficiently noticed by his critics. Of all the authors who have reviewed his writings, Brochard is the only one who seems to have understood and appreciated his humorous side, and humor is, certainly, one of the strongest characteristics of original thinking. The works of Sextus are all of the same general character, as they are all directed either against science, or against the Dogmatics. The vast array of arguments comprising the subject matter, often repeated in the same and different forms, constitutes a summing up of the wisdom of the Pyrrhonic School with many references to the teachings of other schools of philosophy.

The only Pyrrhonist after the time of Sextus whose name has come down to us is Saturninus. He is called by some authorities Saturninus Cythenas, but even his surname is very doubtful.¹⁸ Little is known about him, except that he was the last of the Sceptical leaders, and the last president of the Pyrrhonic School.¹⁹

CHAPTER XXIX

PYRRHONISM IN THE AGE OF SEXTUS

Pyrrhonism in the time of Sextus Empiricus had reverted largely to its original teachings, and corresponded to the theories expressed in the ten Tropes of *epochê*. The dialectic elements introduced by Aenesidemus, while included in the history of the whole movement, were not prominent in its later period.

Sextus gives us an outline of Pyrrhonism as he knew it, the principles of which were very simple. In discussing this subject, he calls Scepticism an *agôgê*, or a movement, rather than a sect, as Pyrrho previously had done. Scepticism was not a sect, if that word implies a systematic arrangement of dogmas, for the Sceptic had no dogmas. We find that Hippobotus, in his work entitled, *About the Sects*, written shortly before our era, does not include Pyrrhonism. Diogenes himself, after some hesitation, remarking that many did not consider it a sect, finally decided to call it so.¹ From a quotation given later by Sextus from Aenesidemus, we know that the latter also used the term *agôgê*, movement. Sextus gives other titles as applied to Scepticism. He said that the Sceptical School was also called the "Seeking School," from its spirit of research, the "Doubting School," and the "School of Suspension of Judgment," as well as the "Pyrrhonic School."

At the time of Sextus particular stress was laid on the method of opposing arguments to each other in every pos-

sible way, and through the equal weight of these arguments to reach first *epochê*, and then *ataraxia*, or repose and tranquillity of soul. This method was applied to all elements of knowledge, both those originating in sense perception and those belonging to the intellect. This, according to Sextus, leads to a philosophical system without a dogma. The Pyrrhonist claimed that he had no dogmas. He was never supposed to state a decided opinion, but only to say what appeared to him. The only statements that he could consistently make were in regard to his own sensations. He could deny that he was warm, or cold, or hungry.

Sextus replied to the charge that the Sceptics deny the testimony of the senses, by refuting it. He distinctly affirms that the testimony of the senses constitutes the appearance of objects.² Like Carneades, he took for granted that things perceived have objective reality, although he did not deny or affirm the fact.

Sextus stated that the testimony of the senses affords the only criteria according to which the Sceptic orders his daily life, as he cannot be entirely inactive. These criteria affect life in four different ways, as follows: They constitute the guidance of nature, they cause the impulse of feeling, they give rise to the traditions of customs and laws, and they make the teaching of the arts important. The Sceptic of Sextus' time encouraged the teaching of the arts, as, indeed, must be the case with professing physicians. Sextus said, "We are not without energy in the arts which we undertake." This was a positive tendency which no philosophy, however negative, could escape, and the Sceptic tried to avoid inconsistency in this respect, by separating his theories from his practical conduct of life. His philos-

ophy controlled his theories and his life was governed by the testimony of the senses. According to the tradition of customs and laws, devotion to the gods is good in daily life, but it is not an abstract good.

Later Pyrrhonism emphasized, as did Pyrrho himself, *ataraxia* in those things that pertain to knowledge, and moderation in the things that life imposes. The method by which *ataraxia*, or peace of mind, could be reached was peculiar to the Pyrrhonist. The discovery of *ataraxia* was, Sextus claimed, apparently accidental, for while the Sceptic withheld his opinion, unable to decide what things were true, and what false, *ataraxia* fortunately followed, as the shadow follows the body. To this simple presentation of *ataraxia* the later Sceptics were loyal.

In seeking *ataraxia* the Pyrrhonist did not entirely escape suffering. He claimed, nevertheless, that he suffered less than the Dogmatist, who is liable to two kinds of suffering, one from the feelings themselves, and the other from the conviction that they are by nature an evil. To the Pyrrhonist nothing was in itself either an evil or a good, and so he thought that life for him was especially easy. For instance, he who considers riches a good in themselves is unhappy in the loss of them, and in possessing them is in fear of losing them; while the Pyrrhonist, remembering the maxim, "No more," was untroubled in whatever condition he might be found. The loss of riches was no more an evil than the possession of them was a good. He who considers anything good or bad by nature is always troubled. The Pyrrhonist, however, endeavored in all things neither to avoid nor to seek anything eagerly.³

In Sextus' time the Pyrrhonist considered the intellectual preparation for producing *ataraxia* to consist not only

in placing arguments in opposition to each other respecting the things of the senses and things of the intellect, but by reversing the process in as many ways as possible. Accordingly, it was not necessary to accept any statement whatever as true, and consequently a state of *epochê* could always be maintained. Although *ataraxia* followed the intellectual process described above, Sextus taught that it was not itself a function of the intellect, or any subtle kind of reasoning. It seemed to be rather a unique form of moral perfection, leading to well-being, or was itself well-being. It was the aim of Pyrrhonism to know nothing and to assert nothing in regard to any subject, but, at the same time, not to affirm that knowledge on any subject is impossible, and consequently to have the attitude of still seeking.

CHAPTER XXX

THE DOWNFALL OF PYRRHONISM

Pyrrhonism was the most consistent system of Scepticism ever offered to the world. It served a distinct purpose. In a certain sense its coming to an end as an organized movement was not a downfall. There were many reasons for the gradual decline of Pyrrhonism, among which political changes took the lead. The marvelous growth of the Roman Empire coincided with the history of Scepticism. After Greece became a part of the Empire the Greek people found themselves in another world. They did not easily accept Roman methods of thinking, and did not immediately adopt the Roman spirit. Centuries elapsed before such a transformation could take place, yet the gradual change in the outlook of the Greeks was very great.

Besides political changes there were other causes for new attitudes of thought. Life in the early schools of Greek philosophy was contemplative, but the conditions of the new world demanded action instead of long hours of philosophic meditation. Gradually as time passed the language of literature, especially in the western part of the Roman Empire changed from Greek to Latin. The Latin language was ill-fitted for philosophical speculations and subsequent generations were increasingly unable to read Greek.

The change from a Greek to a Roman world affected all the activities of life. Long before the schools of philosophy were finally closed, the Roman Empire included all the civil-

ized world. It embraced Britain, Southern Europe, the region of the present Balkan countries, the northeastern part of Africa, Syria, Arabia, Palestine and Asia Minor. To rule such an expanse of country extensive military establishments were demanded. Large numbers of people were engrossed in the study of navigation and of other practical arts. Evidences of Roman architecture are even now found not only in England and Western Europe, but in the most distant parts of Asia Minor. Commerce grew in leaps and bounds and wealth increased. Conquest of other nations brought much treasure to Rome, and even to Athens. Luxury replaced the simple surroundings that had developed Greek philosophy. Life had become practical.

There were philosophical as well as historical causes for the decline of Scepticism. One of the strongest of these was the friendly spirit of coöperation which gradually developed between the schools of philosophy. The strife between them came to an end shortly after the time of Sextus, and was replaced by a general eclectic attitude.

The teaching of Carneades permeated philosophical thought to a remarkable degree. Carneades himself had carried on the strife with the Stoics, but the theory of probability which he introduced was destined to affect all the schools, and to bring them nearer together. The sceptical method aided in developing a spirit of philosophical toleration, and the teachings of Carneades penetrated all later thought. The chief seat of Eclecticism from the beginning was the Academy, where Scepticism had weakened confidence in philosophical systems. The influence of the empirical physicians was strong in introducing the habit of balancing arguments pro and con in scientific discussions. The four leading schools of philosophy, although they approached each

other in their teachings, continued to function as separate organizations.

From the time when Greece became a part of the Roman Empire, in 168 B.C., Greek philosophy gradually entered Roman society but in so doing was itself changed. National and philosophical changes continued to bring about an amalgamation of the schools and more practical methods of thinking. After the first century B.C. philosophy became a part of all higher education throughout the Empire, its eclectic character becoming constantly more marked. In 176 A.D. Marcus Aurelius endowed two chairs in each of the four leading schools in Athens, making no distinction between them.¹

There was in the downfall of Pyrrhonism as an organization a cause that pertained to the intellectual life of all the nations concerned. This was the rise of two distinct positive systems of thinking, first Christianity and then neo-Platonism. In the latter system were combined the most prominent elements of the Platonic and Pythagorean thought as well as many of Aristotle's teachings and some of the doctrines of the Stoics. This new philosophy fulfilled the desire for practical teachings in the practical age of Roman rule.

Thus Greek Scepticism came to an end. Its teachings were wholly out of accord with those which thereafter for a thousand years dominated the thought of the Western world, both religious and philosophical. As a positive influence it did not reappear before the later Renaissance, and as a critical philosophy it was not developed with acumen at all comparable to that of Arcesilaus, Carneades, Aenesidemus and Agrippa before the time of Berkeley and Hume.

Since then a new Scepticism, essentially Greek in character, has rendered marked service to the world in science,

philosophy, ethics, and religion. It has quickened scientific thought by emphasizing, as did the Pyrrhonists, empiric methods of investigation, and by criticizing, as did the Academic Sceptics, all results founded upon insufficient data, or upon false hypotheses. The service to philosophy lay in the stimulus to thought that the frequent attacks of the Sceptics on dogmatic beliefs occasioned. Scepticism brought together all the most prominent theories of the old schools of philosophy to test their weaknesses and expose their contradictions. This very process of criticism of philosophical theories often demonstrated the power of relative truth that they contained.

Greek Scepticism was the antecedent of freedom of conscience, rational criticism, and the absolute right of scientific thought.

PART VII

SCEPTICISM AND ITS MEANING

CHAPTER XXXI

SCEPTICISM AS AN AWAKENING POWER

The spirit of questioning precedes and inspires all search for knowledge. This was made evident in the influence of Greek Scepticism on the subsequent history of thought. The effect of its awakening power was significant in the Renaissance in Italy and France. There had been two notable instances, however, of its influence before that time. One is found in the writings of St. Augustine and the other, in those of Al Ghazali, the Arab philosopher of the eleventh century A.D.

The two forms of Greek Scepticism, Pyrrhonism and Academic Scepticism, continued to a certain extent distinct in their influence for many centuries, as they had been in their early teachings. Both movements based their Scepticism on the difficulty of obtaining knowledge of reality or of the nature of things. Both recognized the relativity of the ideas which are accepted as the measure of knowledge, and, in fact, the relativity of knowledge itself. Both taught the necessity of constant research in the effort to find knowledge. Denial of the possibility of finding it was not included in the platform of either, although the Academy was often accused of such denial, in the heat of discussions. Both schools advocated a spirit of progress — the forever seeking. The seeking of the Pyrrhonists was in the direction of scientific research, particularly of empirical or inductive research. The seeking of the Academicians emphasized the logic of doubt

and thus retained a metaphysical flavor. It culminated, on the one hand, in the proposal by Carneades of a graded system of probability in the search for a criterion of standards of conduct in practical life; and, on the other, in the unanswerable arguments of Aenesidemus and Agrippa to the effect that the search for ultimate truth was futile. The work of Carneades was directly constructive, but that of Aenesidemus and Agrippa was no less so; although their method was more indirect, it strengthened the instinct of the Empiricist by giving him new confidence in the philosophical justification of his natural habit of mind. The result of the reasoning of the Sceptics in the Academy, and of that of the Pyrrhonists, especially Aenesidemus and Agrippa, has been to emphasize the scientific and philosophical estimate of the value and significance of relative knowledge.

Pyrrhonism as a recognized method of thinking lasted nearly six centuries, and Academic doubt less than two. Pyrrhonism is one of the few movements in the history of thought which, despite the fact that it had no teleological aspect, nevertheless maintained its existence for a considerable length of time. This was possible because Pyrrhonists did not oppose custom in religious observances. They constantly maintained a non-aggressive attitude, not only toward religion but also toward politics. They advocated loyalty to the governments under which they lived. Their Scepticism was to a great extent their own private affair and did not outwardly affect their relations to either religion or politics. Human nature, as expressed in public opinion, has not frequently tolerated any strongly organized tendency of thought that did not include teleological theories. Although some form of teleological pragmatism might be accepted by

the public mind, Pyrrhonism offered nothing of that kind. Its long existence on a comparatively non-combative basis, philosophically, may be further explained not only by its attitude toward law and custom, but especially by its scientific activity — it was always seeking. It never denied the possibility of increasing knowledge. Pyrrhonists never forgot that they were seekers after wisdom and naturally allied themselves in scientific research with the leading schools of medicine in the Greek world.

The Academy also, during its sceptical period, apparently wholly disregarded the teleological teaching that had been fundamental in its early history. That teaching, submerged for a time, again came to the surface in later centuries, in Eclecticism and neo-Platonism. After our era positive theories in philosophy slowly grew in influence. The Academy in Athens and in Alexandria and Rhodes passed through a gradual return to the teachings of Plato, and at the time Pyrrhonism came to an end, neo-Platonism was rapidly developing. As Pyrrhonism gave way to more positive beliefs, it disappeared as an organized movement; since then no established system of Scepticism so complete has existed in any part of the world, although there have been many examples of strong sceptical tendencies. The two writers who have had the greatest influence in continuing the sceptical point of view in the lines of Academic Scepticism and Pyrrhonism were Cicero and Sextus Empiricus. The philosophical works of both of these authors were widely read from their time onward. This was especially true in the early centuries after our era in the East.

Manuscript editions of Sextus Empiricus were freely distributed in the Near East, and at some early period his books were translated

into Latin. A Latin version of the *Hypotyposes* was in existence in the thirteenth century. The first Latin version was published by Henry Stephens in 1562, and the first Greek edition was published in 1621.¹

Simultaneously with the decline of Pyrrhonism the new movement of mystical tendency, referred to above, appeared in the Academy, and controlled its teaching to the end of its history. Neo-Platonism was inaugurated by Plotinus (204-270 A.D.). Its mystical teaching had a strong influence in shaping the philosophy and teleology of later centuries. According to the theory of knowledge taught by neo-Platonists, a direct union with reality is possible, transcending the reason. This particular form of mysticism has appeared in subsequent philosophy and poetry, until even in Bergson we find the theory that the mind itself is a part of the very current of life.

There is a strong sceptical tone in the early period of authorship of St. Augustine (354-430 A.D.). He was interested in philosophy from the age of nineteen onward. He read Cicero's books eagerly, and the oldest published work of his which is now extant consisted of three books against the Academicians, or, as it was called later, *On Academicians*. In this book is portrayed his own sceptical experience, and his attempts to surmount it. The argument against Scepticism that he considered the strongest was that mathematical and logical conclusions cannot be denied, as showing the possibility of finding the truth in all lines, an argument which was then unchallenged. His inspiration at this early period of his sceptical thinking was Cicero's *Academica*, but in no instance do his arguments excel those of Antiochus, as reported by Cicero. During the early stage of his Scepticism,

he quotes an unknown Academician regarding the relation of Scepticism to happiness, to the effect that ignorance and research are the only sources of happiness. St. Augustine himself claimed that truth received from God alone was the only way to happiness. He was interested in Scepticism for two years before he wrote his book *Contra Academicos*. By the irony of fate, the writings of this leader among the Church Fathers were an impetus during the Italian Renaissance to the reawakening of sceptical thought. St. Augustine was not a Sceptic, but his views illustrate the trend of thinking in his time. In more than one passage, especially in his earlier writings, he maintains the power of the human reason to deal with the problem of knowledge, yet his later conclusion was that which is sometimes technically called "Methodized Scepticism." That principle has been applied to both philosophy and theology by Descartes and many others. According to that method of dealing with the problem of knowledge, truth and wisdom belong only to God and, in the theological domain, faith is a substitute for knowledge. This theory enabled its advocates to profess adherence to the teachings of theology as it was understood in the time of the Church Fathers and even in later periods, simultaneously with unlimited philosophical speculation in matters of the reason.² After the time in which St. Augustine applied it, the theological aspect of this theory existed side by side with the similar theory in the neo-Platonic philosophy of the Academy, namely, that wisdom may be obtained directly from the principle of reality in the universe.

Justinian closed the schools of philosophy in 529 A.D. and neo-Platonism was no longer publicly taught. The Dark Ages began in the Western world, and freedom of thought gradually came to an end.³

After the closing of the schools of philosophy, Greek enlightenment found a new home under Arab rule. The connecting link between the Greeks and the Arabs was Alexandria, the old seat of Scepticism. There, works on mathematics, science, and philosophy were translated from Greek to Arabic, and furnished the literary impulse in the new movement. Then followed the period of Arab learning and scientific progress in the Mohammedan world. Thus a renaissance of Greek learning gradually appeared in Damascus, Bagdad, and elsewhere, about the eighth century A.D. Universities were established in the leading Mohammedan cities of the East. A new literature arose in the Arabic language, including both original productions and translations of Greek works for use in the Arab universities. The teachings of the translations from the Greek authors were colored by the Mohammedan point of view, with results that are very interesting to the research scholar. The early scientific and medical interests of Alexandria found a new form of expression. In Bagdad and other Eastern cities astronomy was enriched by important discoveries; observatories were built, hospitals and chemical laboratories were founded. In mechanical lines progress was made, as illustrated by the clock which Haroun al Rashid sent to Charlemagne. Here again a spirit of Scepticism appeared in the Arabian philosophy, of which Al Ghazali, of the eleventh century A.D., was the strongest exponent. He wrote *The Collapse of the Philosophers*, and advocated a complete philosophical Scepticism, which was in his own case a kind of mysticism. Scepticism was not as prominent an element of the thinking of Arabic countries as it became later in Italy and France, because Arabian philosophy was, to an even greater degree than that of the West, under the influence of Aristotle.

Commercial intercourse with other nations followed closely upon the intellectual awakening among the Arabs. Its first effect in the West was seen in Spain. For three centuries in that country, from the beginning of the eighth to the eleventh, freedom of thought and tolerance reigned. Universities were built where Arab men and women professors taught side by side, for seclusion of women was not originally a Mohammedan custom. Arabian law was studied in Cordova, as well as in Bagdad and Damascus. Scientific research was prosecuted with zeal in Seville, Cordova, and Barcelona. Translations of Greek books were taken in large numbers to Spain. At that time many Italian youths went to the Spanish universities and studied Arabic philosophy — even the teaching of Averroes who had asserted that religion and philosophy are the same. The writings of Al Ghazali, the Arab Sceptic, became known to Dante when Spanish learning merged with the new thinking in the Italian Renaissance. Commercial relations with Spain helped to introduce freedom of thought into Italy.

There were two strong factors in the awakening of Italy. One was her extensive commerce, and the other was the Crusades. The Crusades strengthened everything that they were designed to kill, and, because of Italian trade and Italian ships, this effect was especially noticeable in Italy. Many of the Crusaders passed through Venice, Pisa, and other Italian ports. The freedom and tolerance that had developed in the Arab universities in Spain appeared to an even greater degree in the universities of Italy during the Italian Renaissance. The freedom of thought lost in the Middle Ages again came into existence. As Western Europe gradually loosened and here and there cast off the dogmatic control that had for many centuries limited its development, the

liberating force was Scepticism and search for the truth. From the time of the eleventh and thirteenth centuries onward the chief studies in the Italian universities were Roman law and philosophy. Many Italian youths studied in the extensive libraries of Constantinople before the downfall of that city in 1453.⁴

The rugs and tapestries of the Arabs were brought to Constantinople on their way to Spain and Italy and in that city Arab merchants added many Greek manuscripts to their stores of merchandise. Two hundred and thirty-eight volumes were taken to Italy by one man at one time.⁵ Spices and perfumes and aromatic woods increased the attraction of cargoes, and commerce and learning combined to introduce freedom of thought into the West. Libraries were established in every large town in Spain, which were filled with books of Greek learning. The hunt for manuscripts was intense in Constantinople, even before the fall of the city in 1453, and these were taken both to Spain and Italy, and inspired there a new attitude of tolerance.

The Spanish Arabs were fond of music. Their songs represented the gayer and more refining elements of their civilization and appeared later to some extent in the Provençal poetry. These ballads promoted freedom of thought, and were associated with progressive culture in the eleventh and twelfth centuries. They opened the way for Dante, Petrarch and Boccaccio. The beginning of free speculation in Italy reminds us of its development in Early Greek Philosophy, as in both cases it was introduced by the poets. The rôle played by Sappho, Xenophanes and Empedocles in Greece was repeated by Dante, Petrarch and Boccaccio in Italy.

Dante (1265-1321), one of the greatest poets in the world's

literature, was also a leading influence in awakening the popular consciousness in Italy. He was one of the first Italian authors to teach the principle of open-mindedness regarding difficult problems, and some of the subtlest passages of *The Divine Comedy* reveal his questioning, seeking spirit. The mind of the general public naturally responded slowly to a work as profound as that of Dante, but his influence increased with every decade.

Dante spoke openly and freely of the faults of his age. His poem shows a strong Moslem influence,⁶ in itself an urge toward tolerance. It was enriched with scientific illustrations which would awaken a love of science. He was familiar with Greek philosophy and quotes Cicero about fifty times. He describes the state of mind produced by philosophy as favorable to a new moral life in a way to remind us of Pyrrho. Dante, Petrarch and Boccaccio led the way to an appreciation of Greek art.

Socrates and Cicero were called the two principal links between Greek and Italian freedom of thought. As it is known that Latin manuscripts of Sextus Empiricus were found in Italy in the thirteenth century, the same was probably true regarding Cicero's writings. Yet when Petrarch, in the fourteenth century, wished to study Cicero more fully, he had great difficulty in procuring the texts. There were, however, libraries in Italy and other countries where all the books of Cicero could be found, as Petrarch proved.⁷ He instigated a widely extended search for them in the libraries of the Cloisters, and found not only Cicero's works but many other important Greek manuscripts which increased his literary resources. Petrarch was a genuine philosopher and free-thinker, and throughout his life, a "seeker" of truth. He was a confessed Sceptic and also something of a mystic. The

first professor of Greek in Italy lived in Boccacio's house in Florence. From that time Greek became the fashion.⁸

The first chair of Dante in Europe was filled by Boccacio, in the University of Florence. This poet was the friend of Petrarch, with whom he was said to "share a single heart."⁹ In the same university a chair in Greek was established in 1396, which was the first in Europe. About that time a certain Gemistos Plethon went to Florence from Athens and taught there. He quoted both Pyrrho and Protagoras. Plethon lectured also in the Circuit of the Churches in Italy. The fall of Constantinople in 1453 sent many scholars to Italy and increased the number of Greek manuscripts in the libraries. The demand for Greek learning was so great that a branch of trade was established to put Greek manuscripts on the market, and to institute a search for new ones in Greece and Asia Minor.

The influence of Pyrrhonism was further felt in the fourteenth century; the classical impulse so strong in producing freedom of thought was especially characteristic of the fifteenth century. This was the era of the first printing presses, which in Italy were established in Venice, Milan, and Florence. During the fourteenth and fifteenth centuries Italy was more distinctly a center of progress than any other country in Europe. It was the first to improve methods of education. The Italian language as it is known at present was evolved. The works of Dante and the other great poets who followed him were read even by muleteers, artisans and villagers. Teaching in the universities was modernized. The Scepticism of the Italian Renaissance was inspired by the study of Greek writings, but the results were spontaneous and not to such a degree a consequence of logical reasoning as had been the case in Greece.

Machiavelli is often called the statesman of the Italian Renaissance. He was a Sceptic of a political type, one who doubted in some lines of thought, and held decided opinions in others. His peculiar form of Scepticism was doubt of the principles of truth and justice in political relations. His interest in classical literature was that of a politician.

One of the great leaders in the new enlightenment in Italy was Pomponazzi (1462 A.D.), professor of philosophy in Padua in the fifteenth century. He studied medicine also and led a group of congenial associates in sceptical thinking and research. Pomponazzi was a typical example of the sceptical spirit in Italy. He insisted on the right of the human reason, and of the scholar to study philosophy and think for himself. His views somewhat resembled those of Academic Scepticism, but he carried his doubt to the still further stage of denying the possibility of finding the truth. He has sometimes been called a positive Sceptic.¹⁰

Italian Scepticism culminated in the philosophical teachings of Bruno and Vanini. For a whole century chairs in Italian universities ordinarily occupied by theologians were filled by philosophers, but the end came in the burning at the stake of Bruno and Vanini. The latter in his sceptical writings was less positive than Pomponazzi and Bruno, and strongly advocated a search for truth.

The man who broke most decisively with the Middle Ages was not a poet or philosopher, but was Galileo, whose development of experimental method was epoch-making; though original, it was based upon a spirit of investigation which reflected that of the curious Greeks with whose works he was familiar, rather than the acquiescent spirit of his medieval predecessors. His work may be looked upon as a consummation of the hopes and purposes of many others. A large

number of men had for a century devoted themselves in the fire of sceptical enthusiasm to an uninhibited study of nature. Among these, Leonardo da Vinci and Copernicus had become preëminent.

Some of the leading causes of the awakening in Italy contributed to similar results in France and in Germany. The contemporary impulse to freedom of thought in Germany was confined largely to religious lines. France was as much opposed to Scholasticism as was Italy and equally enthusiastic regarding the rapidly awakening interest in the classics. Scepticism became as powerful a method of dealing with intellectual difficulties in France as it had proved in Italy. Not until two centuries after it had reached Italy, however, did the wave of enlightenment break on the shores of France. Conditions in Italy from the thirteenth to the fifteenth century were better suited to the growth of freedom than those in France.

Michel de Montaigne (1533-1592) is usually regarded as the leader among the thinkers of the French Renaissance, and his influence on subsequent literature was extensive. Among all the men of his time he is considered to have been the most familiar with the teachings of Greek Scepticism, and his own sceptical attitude is of especial interest. His writings show familiarity with the *Hypotyposes* of Sextus Empiricus. Montaigne built a wonderful study in a tower where he kept his favorite books, which were said to number one thousand. The rooms in the tower were floored with brick, as is the case even now in some old French houses. In his reading room the joists and rafters were visible, and on these were inscribed numerous quotations from the works of Sextus Empiricus. He must have read Sextus in Latin as his knowledge of Greek was not sufficient to enable him to

read the originals. Indeed, it is said that there were only nine Greek books in his library. His familiarity with the first book of the *Hypotyposes* of Sextus is shown by these quotations inscribed on the rafters:

"There is no reason which is not opposed by an equal reason."

"It may be, and it may not be."

"Guiding ourselves by customs, and by the senses."

"I determine nothing."

"I do not comprehend things, I suspend judgment, I examine."¹¹

Montaigne, like Pyrrho, respected the opinions of those around him. He went much farther than Pyrrho, however, in regard to the established religion, following more in the line of the teachings of neo-Platonism and the Church Fathers, in separating wisdom derived from divine sources from that of the reason. Montaigne was, outwardly at least, a faithful member of the Roman church. He said that it was necessary to put faith in the place of judgment in things belonging to God. He valued faith for its psychological effect. His Scepticism, as far as it went, resembled Pyrrhonism more than the Scepticism of the Academy, and his authority was Sextus rather than Cicero. Montaigne often quoted Sextus indirectly and, even when his statements of the opinions of Sextus could not be called quotations, he included long passages of the *Hypotyposes*, sometimes in unbroken sequence, and sometimes mixed in with his own arguments.¹² He did not apply Scepticism to as wide a field as did Pyrrho, and did not consider knowledge as much a matter of degree as of kind, subject to different theories for each kind. Montaigne's Scepticism was largely the result of his temperament—he was of the type of Lessing and

others who would rather inquire than discover. The casual critic of the sceptical as well as of the positive beliefs of Montaigne finds less sincerity and seriousness in him than in the leaders of the Italian Renaissance.

By one of the later French Sceptics, so called, Pyrrho is included in a list of the leaders of thought in ancient Greece. Critics of the influence of Greek Scepticism on the French Renaissance sharply discriminate between that of Pyrrhonism and Academic Scepticism. The one is called a Scepticism without affirmation or negation, a general principle of free scientific inquiry; and the other, a form of Scepticism adopted in order to obtain a foothold for some dogmatic teaching.¹³ These two forms of Scepticism may be more definitely distinguished from each other in their subsequent influence than they really were in the time of their greatest strength. The reason for this is evident. The authority for Pyrrhonism in later centuries was found in the books of Sextus Empiricus who gave a fair representation of its teachings; the authority for Academic Scepticism, on the other hand, was Antiochus as presented by Cicero, and Antiochus himself was not a thorough Sceptic, and did not fairly represent the Academy in its sceptical period.

Sceptical thinkers in French literature have sometimes been divided into two classes on this basis; i.e., Rabelais, Charron, Sanchez, Le Voyer, and Rousseau, as influenced especially by Pyrrhonism; Descartes, Peter Ramus, Malebranche, Huet of Avranches, Bayle, D'Alembert, and Voltaire, as belonging to the Academic group. Pascal is placed in both lists.¹⁴

The spirit of questioning that was the precursor of modern progress was remarkably represented in England in the thirteenth century. The work of Roger Bacon at that time

is well known. He had no immediate successors during the period of the earlier Renaissance, however, who contributed anything of particular significance to the progress of the awakening. It was four centuries later that Francis Bacon well expressed the spirit of the new science of Copernicus and Galileo, though he was not very familiar with its substance. Bacon formulated the primary principles of inductive experimental method, and thus brought them into the scientific consciousness of his contemporaries and successors. His conception of legitimate scientific method, however, was decidedly one-sided. He never realized the importance of that procedure of hypothesis and verification which has since become incomparably more powerful than the toilsome methods which he recommended. His influence, none the less, and perhaps even on this account, was strong in restraining the enthusiasm of the mathematicians of the seventeenth century. There were men like Fermat and Pascal who would have established fundamental scientific laws by deduction from premises that were unsubstantiated, although apparently reasonable. As a practical Sceptic, therefore, Francis Bacon compels our interest: the more so, since his scientific limitations were the same as those of the ancient Empiricists of the later Greek schools of medicine. This was, however, less justifiable in the case of Bacon; one may also conclude that his influence was correspondingly salutary.

There have been philosophers of sceptical tendencies since Montaigne, Bacon, and others of their type, belonging to their period. Among such Berkeley and Hume are preëminent. Their thought has been important in determining the general tendencies of our own modern habits of thinking, and their criticisms have been significant in the development of science itself. The history of modern philosophical Scep-

ticism, however, lies beyond the scope of our present study. Its influence is sufficiently well shown by its effect in the Renaissance. In this period it led to the most remarkable escape from the tyranny of authority that has ever taken place. We can trace its influence with literary precision in the writings of poets, philosophers and essayists, and in the discoveries of the scientists. The real spirit of the Pyrrhonist was found in all who contributed to the new freedom.

SCEPTICISM AND RESEARCH

Scepticism in the popular understanding of the term is usually supposed to imply denial. The Sceptic is thought to be one who does not believe statements generally accepted as true. In the minds of many the word has an irreligious implication. This interpretation of the meaning of Scepticism does not apply to philosophical Scepticism which is not denial of any religious, political, cultural, or moral tenets held by any class of society. It is an attitude of open-mindedness toward knowledge. The Sceptic has no proof that ultimate knowledge has been found; he never denies the possibility of finding it, but advocates the constant seeking for it. Wherever freedom of thought and scientific research flourish, there will always be a spirit of doubt and questioning. Scepticism appeals to the reason to evolve higher forms of knowledge than those accepted by the majority, and thus progress takes place.

Although the sceptical elements of Pyrrhonism found their origin in the earlier philosophical development of the Greeks, a similar type of questioning characterizes other lines of awakening in critical thinking. One of the most striking traits of the *Prometheus* of Aeschylus is that it asserts the right of men to form opinions that disagree with those attributed to the gods of Greek mythology. The *Agamemnon* by the same author reaches a similar result in a different way. Many of the finest touches of the Greek

drama, in the height of its literary excellence, express the insurrectionary spirit of the thoughtful mind, against the injustice of the unthinking, whether gods or man. The best of the Greek dramas teach independence of thought, a spirit of progress, and the power of the human reason. In undertaking the search for knowledge, the seeker must approach the problem not only with an open mind, but without prejudice.

The leading characteristic of philosophical Scepticism is the acceptance of the relativity of knowledge as thus far found. The positive side of the teaching of the Sceptics on this subject may be given somewhat as follows, although the arguments used by them to attack the idea of superficial knowledge were customarily presented in a negative form: Knowledge as we know it is not final, but relative. To say that knowledge is relative does not in any way detract from its value; but, on the contrary, the test of knowledge is its value. The idea or theory that works in experience is true; and its truth is not at all impaired by subsequent discovery that a theory exactly the opposite may work satisfactorily at the same time. Thus, for instance, it is true that the sun rises and sets, as far as the practical needs of life are concerned, and not very many centuries have passed since it was supposed to be true in theory. From the beginning of history human activities have depended on the light and darkness caused by sunrise and sunset. The discovery that the sun neither rises nor sets did not alter the effect of its appearance and disappearance. The cause of the change in the seasons and of varieties of climate in different parts of the world is equally definite and equally relative. Astronomical explanations do not agree with appearances, but it is the appearance that is real in practical life. Even should physics

and astronomy eventually teach that from a scientific point of view the universe is not there at all, in the sense in which we understand it, the practical experiences of daily life would not be affected. The details of experience and their ordinary explanations are true for us, and just as true, practically, as if they actually appeared to agree with scientific theories regarding their causes. Should cause itself, and time and space also prove something other than our incomplete concepts concerning them would imply, it would not affect their value in experience.

The Greek Sceptics did not go so far as to question the concepts of truth and justice as possible ideals, but their relative character in experience was maintained. The standpoint of the Sceptics regarding the relativity of knowledge, given in modern terms, would be that those things are true which are adapted to their environment. The only positive assertion that they made was that thus far final knowledge had not been found, at least in their experience. The Pyrrhonist was debarred by his platform of doubt from formulating positive statements regarding the relativity of knowledge, and from estimating the different degrees of its value. The Sceptic who came nearest to creating such a formula was Carneades, who proposed his theory of probability as a basis for a criterion in the practical conduct of life.

The representatives of literary or philosophical Scepticism since the time of the Dark Ages have not been, however, the strongest force in bringing about freedom of thought and a spirit of research. For this change we are indebted to the scientists. Pyrrhonism in modern times is found in the laboratory. The attitude of open-mindedness and dependence on scientific experiment in the search for knowledge is the modern type of the Pyrrhonic spirit. Every time that

human opinions are reversed by a Darwin or an Einstein, a period of so-called Scepticism is both the incentive and the result. The discoveries of the scientist follow almost without exception upon a sceptical attitude toward previously accepted beliefs. Pyrrhonism lives in the open-minded attitude of research — in modern parlance it is called the scientific method of thinking. Each great discovery in the present, as in the past, arises from the ever-recurring spirit of Scepticism that doubts and questions. When each change of base takes place as a result of some overwhelming discovery in science, a new conception of nature arises which we regard as positive. The result of new forms of knowledge may seem to be positive but are never final. The basis of all scientific research should be an attitude of receptivity regarding progress. New discoveries should free us from the authority of prejudice and open a large vista of new values.

Huxley introduced the word "agnosticism" as identical with the Pyrrhonic point of view. Agnosticism, however, has grown to have an increasingly positive meaning and does not fairly represent the attitude of the Pyrrhonist.

The one thing the existence of which is not doubted is life, and the one thing that we can know about life is experience. Democritus said, "We perceive nothing certain in reality, but only as a transitory thing according to the condition of the body and the inflowing and reacting influences." "Tranquillity comes to men through moderation in enjoyment and through symmetry of life."¹

Philosophical research should not differ fundamentally in its method from the seeking of the scientist. There is no special rule of procedure that belongs to one and not to the other. The results reached by both are necessarily related to each other.

Philosophy deals with meanings and values in life, and the basis on which they rest. Science deals with the appearances which give meaning and value to life, and the laws that pertain to them. The attitude of mind necessary in both of these forms of research is freedom from bias. When actuated by that spirit, especial pleasure attends the pursuit of both science and philosophy.

APPENDIX

THE TEN TROPEs OF EPOCHE ¹

INTRODUCTION

Certain Tropes were commonly handed down by the older Sceptics, by means of which *epochê* seems to take place. They are ten in number, and are called synonymously *logoi* and *tropoi*. They are these: The first is based upon the differences in animals; the second upon the differences in men; the third upon the difference in the constitution of the organs of sense; the fourth upon circumstances; the fifth upon position, distance and place; the sixth upon mixtures; the seventh upon the quantity and constitution of objects; the eighth upon relation; the ninth upon frequency or rarity of occurrences; the tenth upon systems, customs, laws, mythical beliefs, and dogmatic opinions. We make this order ourselves.²

These Tropes come under three general heads: the standpoint of the judge, the standpoint of the thing judged, and the standpoint of both together. Under the standpoint of the judge come the first four, for the judge is either an animal, or a man, or a sense, and exists under certain circumstances. Under the standpoint of that which is judged come the seventh and the tenth. Under the one composed of both together come the fifth and sixth, the eighth and the ninth. Again, these three divisions are included under the Trope of relation, because that is the most general one; it includes the three special divisions and these in turn include the ten. We say these things in regard to their probable number and we proceed in the following chapter to speak of their meaning.

THE FIRST TROPE

I. Based upon the Differences in Animals

It is probable that inequalities and differences in origin cause incompatibility, discord and conflict between the sensations of the different animals. As the breath of the musician, one and the same when blown into the flute, becomes sometimes a high tone and sometimes a low tone — so it is natural to suppose that external objects are regarded differently according to the different constitutions of the animals which perceive them. For we cannot ourselves judge between our own ideas and those of other animals, being ourselves involved in the difference. The dog perceives better through smell than we and is not inferior to man in reasoning; we cannot consider our own ideas superior to those of the irrational animals. I may say how each object appears to me, but in regard to what it is by nature, I shall be obliged to suspend judgment.

THE SECOND TROPE

II. Based upon Differences in Men

Men differ in personal peculiarities. Alexander's table waiter shivered when he was in the sun — and felt warm in the shade. While such differences exist in men in regard to the body . . . it is probable that men also differ from each other in respect to the soul. The best example of the numerous and infinite differences of opinion among men is the contradiction in the sayings of the dogmatics, not only about other things, but about what it is well to seek and to avoid. The poets have also fittingly spoken about this, for Pindar said:

“One delights in getting honors and crowns through storm-footed
horses,
Another in passing life in rooms rich in gold,
Another still, safe travelling enjoys, in a swift ship, on a wave of the
sea.”

If we believe some only, let some one tell us with whom to agree, —

and so with no one to decide, we are brought round to the suspension of judgment.

THE THIRD TROPE

III. Based upon Differences in Perception

Paintings seem to have hollows and prominences to the sense of sight, but not to the sense of touch. Each of the phenomena perceived by us seems to present itself in many forms, as the apple, smooth, fragrant, sweet, yellow. It is possible that . . . other qualities exist which would affect other sense organs if we possessed them. He who decides whether nature exists or not, if he is an uneducated man, would be, according to the Dogmatics, untrustworthy. If he is a philosopher, he is a part of the disagreement and is himself to be judged, but is not a judge. If . . . the senses do not comprehend the external world, the intellect cannot comprehend it either.

THE FOURTH TROPE

IV. Based upon Circumstances

Since the anomalies depending upon conditions are so great, it is perhaps easy to say how each object appears to each man, but not so of what kind it is, because the anomaly is not of a kind to be judged, for proof always needs a criterion to establish it, and the criterion needs a proof that it may be shown to be true.

THE FIFTH TROPE

V. Based upon Position, Distance and Place

According to these the same things appear different, as, for example — the same tower appears round from a distance but square nearby. The light of the lamp appears dim in the sun, but bright in the dark; the same rudder appears broken in the sea, but straight, out of it. All phenomena are seen in relation to place, distance and

position, each of which relations makes a great difference with the idea. . . . If one wishes to make use of a proof, should he say that the proof is false, he contradicts himself, but if he declares the proof to be true, proof of its proof will be demanded . . . and so on to the *regressus in infinitum*.

THE SIXTH TROPE

VI. Based upon Mixtures

Since no object presents itself alone, but always together with something else, it is perhaps possible to say of what nature the mixture is — but of what sort the external object really is, we shall not be able to say. A sound appears different in rare air from what it is in dense. We cannot say anything regarding the nature of external objects.

THE SEVENTH TROPE

VII. Based upon the Quantity and Constitution of Objects

The filings of silver by themselves appear black, but as a whole appear white. We can say of what kind the filing of silver is and what many of them put together are, (so of all things) we can say what they are in relation, but not the nature of the thing by itself because of the anomaly in the ideas which we have of things according to the way in which they are put together. So, the argument puts in confusion the existence of external objects.

THE EIGHTH TROPE

VIII. Based upon Relation

We suspend our judgment as to what things are absolutely in their nature, since everything appears in relation to something else. The thing judged appears to be in relation to the judge; and everything is in relation to the things considered together with it, as the rela-

tion of the right hand to the left. So we shall not be able to say exactly what each object is by nature, but what it appears to be like in relation to something else.

THE NINTH TROPE

IX. Based on Frequency and Rarity of Events

Since the same things according to the frequency or rarity that they are met with would seem to be now valuable and now not so, we are not able to say what each external object is absolutely.

THE TENTH TROPE

X. Connected with Morals, Relating to Schools, Customs, Laws, Mythical Beliefs and Dogmatic Opinions

Among the Tauri in Scythia it was a law to offer strangers in sacrifice to Artemis, but with us it is forbidden to kill a man near a temple . . . by some traditions Jupiter is said to be the father of men and gods, and by others, Oceanus. Some say that our affairs are directed by the providence of the gods, but others say that there is no providence. Since such anomaly of things is shown, we shall not be able to say what objects are by nature, but only what each thing appears to be like, according to this or that school, or this or that law, or this or that custom, or according to each of the other conditions. Therefore, we must suspend judgment.

NOTES

CHAPTER I

- ¹ Hans Meyer, *Geschichte der alten Philosophie*. München, 1925, X, 446-447.
- ² Eduard Zeller, *Outlines of the History of Greek Philosophy*. London, 1922, 6, 7.
- ³ Eduard Zeller, *Die Philosophie der Griechen*. Leipzig, I¹, 42.
- ⁴ Plato, *Phaedrus*, 274. Herodotus, II, 178. Lübker's *Reallexikon des klassischen Altertums*, Naucratis. Leipzig, Berlin, 1914.
- ⁵ Herodotus, I, 17. John Burnet, *Greek Philosophers, Thales to Plato*. London, 1914, 17.
- ⁶ Zeller, *Outlines*, 19.
- ⁷ John Burnet, *Early Greek Philosophy*. London, 1920, 133, Frag. 34, 36. Hermann Diels, *Die Fragmente der Vorsokratiker*. Berlin, 1913, II, B, 34, 35. Sextus Empiricus, *Hypotyposes*. Bekker, Berlin, 1842, I, 224.
- ⁸ Athenaeus, *Deipnosophistae*, II, xi, 7. Diels, *op. cit.*, II, B, 1.
- ⁹ Plato, *Sophistes*, 242. Burnet, *Early Gr. Phil.*, Xenophanes.
- ¹⁰ Sext. Em., *Hyp.*, I, 224.
- ¹¹ Sext. Em., *Hyp.*, I, 210-212.

CHAPTER II

- ¹ Zeller, *Phil. der Griech.*, I¹, 845.
- ² Zeller, *Phil. der Griech.*, I¹, 243.
- ³ Zeller, *Phil. der Griech.*, I¹, 887.
- ⁴ Sext. Em., *Hyp.*, I, 213, 214.
- ⁵ Zeller, *Phil. der Griech.*, I, 921.
- ⁶ Diels, *Vorsokratiker*, II, 56; A, I, 140.
- ⁷ Plutarch, *Life of Alexander*, VIII.
- ⁸ I. L. Heiberg, *Geschichte der Mathematik und Naturwissenschaften in Altertum*. München, 1925, 97, Note 5.
- ⁹ Heiberg, *op. cit.*, 91 seq.

CHAPTER III

- ¹ Plato, *Protagoras*, 357.
- ² *Gorgias*, 482. Republic, VIII, 557.
- ³ *Gorgias*, 448, 456.
- ⁴ Plato, *Apology*, 28-29. Jowett's 3d ed., Oxford Univ. Press.
- ⁵ Cicero, *Academic Questions*, I, iv.
- ⁶ *Theaetetus*, 150. Zeller, *Phil. der Griech.*, III, i, 495.

CHAPTER IV

- ¹ Victor Brochard, *Les Sceptiques grecs*. Paris, 1889, 39.
- ² Diog. Laert., IX, xi, 3.
- ³ Suidas, *Lexikon*, Pyrrho. Bekker, Berlin, 1854. Brochard, *op. cit.*, 52.
- ⁴ Diog. Laert., IX, xi, 1. Suidas, *Lexikon*, Pyrrho, Pausanias, VI, xxiv.
- ⁵ Sext. Em., *Hyp.*, I, 28.
- ⁶ Sext. Em., *Math.*, A, 272, 281. Meyer, *op. cit.*, 447.
- ⁷ Diog. Laert., IX, xi, 6.
- ⁸ Sext. Em., *Math.*, A, 282.
- ⁹ Suidas, *Lexikon*, Socrates, Pyrrho.
- ¹⁰ Suidas, *Lexikon*, Theodorus. P. L. Haas, *Leben des Sextus Empiricus*. Burghausen, 1882, 7.
- ¹¹ Diog. Laert., IX, xi, 2. Zeller, *Phil. der Griech.*, III, i, 497-498.
- ¹² Plutarch, *Life of Alexander the Great*, VIII.
- ¹³ Diog. Laert., IX, x, 3.
- ¹⁴ Diog. Laert., IX, x, 2.
- ¹⁵ Diog. Laert., IX, xi, 3.
- ¹⁶ Diog. Laert., IX, xi, 4 and 7.
- ¹⁷ Diog. Laert., IX, xi, 6.
- ¹⁸ Stobaeus, *Serm.* Lipsiae, 1912, 121, 28.
- ¹⁹ Ath., *op. cit.*, X, 14.
- ²⁰ Franz Susemihl, *Geschichte der griechischen Literatur in der Alexandrinerzeit*, I, 108.
- ²¹ Diog. Laert., IX, xl, 5.
- ²² Aristotle, *Ethics*, N, 10, 7, 3. Sext. Em., *Hyp.*, I, 117.

CHAPTER V

- ¹ Diog. Laert., XI, viii.
- ² Frederick Barry, *The Scientific Habit of Thought*. Columbia University Press, 1927, 72.
- ³ Sext. Em., *Hyp.*, I, iii.
- ⁴ Sext. Em., *Math.*, VII, 28. Meyer, *op. cit.*, 447. Zeller, *Phil der Griech.*, III, 501.
- ⁵ Diog. Laert., IX, xi, 3.
- ⁶ Cic., *Ac.*, II, xxiii.
- ⁷ Diels, *op. cit.*, A, 56, 140. Diog. Laert., IX, x, 1.
- ⁸ Sext. Em., *Math.*, VII, 87, 88.
- ⁹ Diels, *op. cit.*, I, 59; A, 144.
- ¹⁰ Sext. Em., *Hyp.*, I, 208.
- ¹¹ Diog. Laert., IX, xi, 108.
- ¹² Cic., *De Finibus*, IV, xvi.
- ¹³ Burnet, *Early Greek Phil.*, Fr. 9.
- ¹⁴ Burnet, *Early Greek Phil.*, Fr. 117.
- ¹⁵ Wachsmuth, *Sillographori Graecorum Reliquiae*. Lipsiae, 1885, 21, 22.

CHAPTER VI

- ¹ Plutarch, *Life of Alexander*, LXIX.
- ² A. Berriedale Keith, *Buddhist Philosophy in India and Ceylon*. Oxford, Clarendon Press, 40.
- ³ Keith, *op. cit.*, 45.
- ⁴ Keith, *op. cit.*, 239.

CHAPTER VII

- ¹ Diog. Laert., IX, xii, 3. Suidas, *Lexikon*, Aratos.
- ² Brochard, *op. cit.*, 80.
- ³ Diog. Laert., IX, xii, 1.
- ⁴ Wachsmuth, *op. cit.*, 17.
- ⁵ Wachsmuth, *op. cit.*, 14.
- ⁶ Or these books may be a part of the *Silli*. Sext. Em., III, 2.
- ⁷ Diog. Laert., IX, xii, 2 and 6.
- ⁸ Suidas, *Hecataeus*.
- ⁹ Simon Sepp, *Die philosophische Richtung des Cornelius Celsus*. Freising, 1893, 98.
- ¹⁰ Diog. Laert., IX, xi, 6.
- ¹¹ Sext. Em., *Hyp.*, I, x, 20.
- ¹² Diog. Laert., IX, xii, 1.
- ¹³ *Phaedrus*, 278, B.
- ¹⁴ Wilamowitz-Moellendorff, *Philologische Untersuchungen*. Berlin, 1880, II, 291.
- ¹⁵ Sext. Em., *Hyp.*, I, viii.
- ¹⁶ Diog. Laert., IX, xii, 1 and 7.

CHAPTER VIII

- ¹ Sext. Em., *Math.*, A, 53.
- ² Suidas, *Hecataeus of Abdera*.
- ³ Diog. Laert., IX, xi, 6.
- ⁴ Brochard, *op. cit.*, 6, 61.
- ⁵ Susemihl, *op. cit.*, I, 115, Note 541; II, 339, Note 483.
- ⁶ Susemihl, *op. cit.*, 107 *seq.*
- ⁷ Cic., *Ac.*, II, xxiii.
- ⁸ Cic., *De Finibus*, II, xi.
- ⁹ Diog. Laert., VII, iii.
- ¹⁰ Cic., *De Finibus*, II, xiii, and III, iii.
- ¹¹ Stob., *Serm.*, 121, 28.
- ¹² Cic., *Ac.*, II, xlii. Cic., *De Fin.*, III, iv.
- ¹³ Brochard, *op. cit.*, 60.
- ¹⁴ Cic., *Ac.*, I, xii; II, xxiii.

CHAPTER IX

- ¹ Hans von Arnim, *Dio von Prusa*. Rostock, 1898, 80.
- ² Diog. Laert., V, ii, 5.
- ³ Diog. Laert., VII, v, 2.
- ⁴ P. Foucart, *Les associations religieuses chez les Grecs*. Paris, 1873, 48.
- ⁵ Ath., *op. cit.*, VIII, 64. Wilam.-Moell., *op. cit.*, 263.
- ⁶ Wilam.-Moell., *Phil. Unter.*, 268, 288.
- ⁷ Ath., *op. cit.*, VIII, 64. Wilam.-Moell., *op. cit.*, 263.
- ⁸ Sappho, *Anthologica Lyrica*. Eduardus Hiller, 1890, 103 k.
- ⁹ Jane Harrison, *Primitive Athens*. Cambridge, 1906.
- ¹⁰ Compare Jean Revelle, *Les Origines de l'Episcopat*. Paris, 1894.
- ¹¹ Ath., *op. cit.*, V, 7; XII, 69.
- ¹² "Aristotle on His Predecessors," Taylor, *Phil. Classics*. London, 1907,
- 14, 15.
- ¹³ Cic., *De Finibus*, V, 1.
- ¹⁴ Plutarch, *On Exile*, X, x.
- ¹⁵ Cic., *De Finibus*, V, i.
- ¹⁶ Pausanias, I, xxix.
- ¹⁷ Diog. Laert., III, i, 9 and 25.
- ¹⁸ Suidas, *Lexikon*, Plato.
- ¹⁹ Diog. Laert., IV, viii, 5.
- ²⁰ Cic., *De Finibus*, V, i.

CHAPTER X

- ¹ Compare Diog. Laert., IV, vi.
- ² Susemihl, *op. cit.*, I, 701-703.
- ³ Compare Diog. Laert., IV, v.
- ⁴ Susemihl, *op. cit.*, I, 117 seq.
- ⁵ Plutarch, *Flatterer versus Friend*, XXII.
- ⁶ Euseb., *Praep. Evang.*, XIV, vi.
- ⁷ Sext. Em., *Hyp.*, I, 220.
- ⁸ Schmekel, *Die Philosophie der mittleren Stoa*. Berlin, 1892, 151-152.
- ⁹ Diog. Laert., IV, v, 6.
- ¹⁰ Susemihl, *op. cit.*, I, 120.
- ¹¹ Sext. Em., *Math.*, XI, 51-58.
- ¹² Cic., *Ac.*, II, 18.

CHAPTER XI

- ¹ Zeller, *Phil. der Griech.*, III, i, 512.
- ² Diog. Laert., IX, xii, 6.
- ³ Euseb., *Praep. Evang.*, XIV, 12.
- ⁴ Euseb., *Praep. Evang.*, XIV, iv, 14.

- ⁵ Suidas, *Lacydes*. Diog. Laert., IV, viii, 1.
- ⁶ Cic., *Ac.*, II, V.
- ⁷ Albert Goedeckemeyer, *Die Geschichte des griechischen Skepticismus*. Leipzig, 1905, 33.
- ⁸ P. E. More, *Hellenistic Philosophies*. Princeton, 1923, 19-21.
- ⁹ Sext. Em., *Math.*, VII, 150-159.
- ¹⁰ Sext. Em., *Math.*, VII, 150 *seq.*
- ¹¹ Sext. Em., *Math.*, VII, 158.
- ¹² Sext. Em., *Math.*, VII, 158.
- ¹³ Cic., *Ac.*, II, vii, xii.
- ¹⁴ Cic., *Ac.*, II.
- ¹⁵ Sext. Em., *Hyp.*, I, 233.
- ¹⁶ Cic., *Ac.*, II.
- ¹⁷ Euseb., *Praep. Evang.*, XIV, vi, 5.
- ¹⁸ Sext. Em., *Math.*, VII, 158.

CHAPTER XII

- ¹ Compare Brochard, *op. cit.*, 104.
- ² Anathon Aall, *Der Logos*. Leipzig, 1896, 134-135.
- ³ Cic., *Ac.*, II, xlvii *seq.*
- ⁴ Sext. Em., *Math.*, VII, 150-153.
- ⁵ Cic., *Ac.*, II, xlvii.
- ⁶ Schmekel, *op. cit.*, 341.
- ⁷ Diog. Laert., VII, iv, 7.
- ⁸ Diog. Laert., VII, v, 4.

CHAPTER XIII

- ¹ Diog. Laert., IV, vi, 9.
- ² Zeller, *Outlines*, 116.
- ³ Zeller, *Outlines*, 117.
- ⁴ Euseb., *Praep. Evang.*, XIV, v, 10.
- ⁵ Sext. Em., *Hyp.*, I, 234.
- ⁶ Diog. Laert., IV, vi, 8.
- ⁷ Euseb., *Praep. Evang.*, XIV, v.
- ⁸ Cic., *Ac.*, II, xviii.
- ⁹ *Cont. Academ.*, I, xvii.
- ¹⁰ Brochard, *op. cit.*, 119, 120.
- ¹¹ Zeller, *Phil. der Griech.*, III, i, 196.
- ¹² Diog. Laert., IV, vi, 7.
- ¹³ Meyer, *op. cit.*, 449.

CHAPTER XIV

- ¹ Diog. Laert., IV, viii, 1. Brochard, *op cit.*, 121.
- ² Diog. Laert., IV, viii, 4 *seq.*
- ³ Suidas, *Lakydes*.
- ⁴ Susemihl, *op. cit.*, I, 126, 606.
- ⁵ Goedeckemeyer, *op. cit.*, 50-51.
- ⁶ Zeller, *Outlines*, 279.
- ⁷ Cic., *Ac.*, II, xxx.
- ⁸ Cic., *Ac.*, II, xxx.
- ⁹ Diog. Laert., IV, ix, 2 *se*
- ¹⁰ Cic., *Ac.*, I, xii.
- ¹¹ Diog. Laert., IV, ix, 4.
- ¹² Sext. Em., *Adv. Math.*, IX, 182.
- ¹³ Diog. Laert., VII, vii, 4.
- ¹⁴ Suidas, *Lexikon*, Carneades.
- ¹⁵ Plutarch, *On Contentment*, XIX.
- ¹⁶ Diog. Laert., IV, ix, 7.
- ¹⁷ Plutarch, *On Talkativeness*, XXIII.
- ¹⁸ Susemihl, *op. cit.*, I, 153.
- ¹⁹ Cic., *De Nat. Deorum*, I, xxi.

CHAPTER XV

- ¹ C. Martha, *Études morales sur l'antiquité*. Paris, 1896, 83.
- ² Cic., *Ac.*, II, xlv.
- ³ Martha, *op. cit.*, 88.
- ⁴ Martha, *op. cit.*, 115.
- ⁵ Cic., *De Repub.*, III, 7 *seq.*
- ⁶ Martha, *op. cit.*, 119.

CHAPTER XVI

- ¹ Sext. Em., *Math.*, VII, 166-168.
- ² Plutarch, *On Talkativeness*, XXIII.
- ³ Cic., *Ac.*, II, xxvi, xxix.
- ⁴ Sext. Em., *Math.*, VII, 164. Euseb., *Praep. Evang.*, XIV, 7, 8.
- ⁵ Cic., *Ac.*, II, xxix.
- ⁶ Sext. Em., *Math.*, VII, 116.
- ⁷ Sext. Em., *Math.*, VII, 166.
- ⁸ Cic., *Ac.*, II, xxxii, xxxiii.
- ⁹ Brochard, *op. cit.*, 183.
- ¹⁰ Cic., *Ac.*, II, xxx *seq.*
- ¹¹ Sext. Em., *Hyp.*, I *seq.*
- ¹² Sext. Em., *Math.*, VII, 166-168.

- ¹³ Cic., *De Finibus*, V, vi seq.
- ¹⁴ Cic., *De Finibus*, V, vii, 18.
- ¹⁵ Cic., *Ac.*, II, xxxiv.
- ¹⁶ Brochard, *op. cit.*, 160.
- ¹⁷ Schmekel, *op. cit.*, 368, 369.
- ¹⁸ Cic., *De Finibus*, V, xxi.
- ¹⁹ Cic., *De Finibus*, V, xxiii.
- ²⁰ Cic., *De Finibus*, II, vi, xviii.
- ²¹ Cic., *De Finibus*, V, vii.
- ²² Cic., *De Fato*, X, v.
- ²³ Cic., *De Fato*, XVI, xvii, xi.
- ²⁴ Cic., *De Fato*, X, xi.
- ²⁵ Cic., *De Nat. Deo.*, III, vii.
- ²⁶ Zeller, *Outlines*, 272. Ueberweg-Praechter, *Grundriss der Geschichte der Philosophie des Altertums*. Berlin, 1920, 611.
- ²⁷ Cic., *De Nat. Deo.*, III, xvii.
- ²⁸ Cic., *De Nat. Deo.*, II, viii, xxi.
- ²⁹ Cic., *De Nat. Deo.*, III, xiv.
- ³⁰ Diog. Laert., IV, ix, 7.
- ³¹ Sext. Em., *Math.*, XI, A, 70.
- ³² Cic., *De Div.*, II, vii and xvii.
- ³³ Cic., *De Div.*, II, lxxii.
- ³⁴ Cic., *De Nat. Deo.*, III, xi.

CHAPTER XVII

- ¹ Cic., *Ac.*, II, xxxiv.
- ² Zeller, *Outlines*, 280.
- ³ Cic., *Acad.*, II, xxxi.
- ⁴ Sext. Em., *Adv. Math.*, VII, 166-167.
- ⁵ Euseb., *Praep. Evang.*, XIV, vii, 14.

CHAPTER XVIII

- ¹ Meyer, *op. cit.*, 451.
- ² Zeller, *Outlines*, 275.
- ³ Zeller, *Outlines*, 278.
- ⁴ Cic., *De Nat. Deo.*, III, xiii.
- ⁵ Zeller, *Outlines*, 97.
- ⁶ Cic., *De Div.*, I, viii.
- ⁷ Compare Susemihl, *op. cit.*, 69-70.
- ⁸ Compare Susemihl, *op. cit.*, II, 129-131.
- ⁹ Cic., *De Nat. Deo.*, I, xlv.

CHAPTER XIX

- ¹ Zeller, *Outlines*, 273.
- ² Zeller, *Phil. der Griech.*, III, 541, Note 1.
- ³ Meyer, *op. cit.*, 451-457.
- ⁴ Susemihl, *op. cit.*, 130, 131.
- ⁵ Zeller, *Phil. der Griech.*, III, i, 542.
- ⁶ Sext. Em., *Hyp.*, I, 220.
- ⁷ Zeller, *Phil. der Griech.*, III, i, 543, Note 2.
- ⁸ Ueberweg-Praechter, *op. cit.*, 494.
- ⁹ Cic., *Ac.*, II, vi. Stob., *Ecl.*, II, 40 ff.
- ¹⁰ Euseb., *Praep. Evang.*, XIV, ix.
- ¹¹ Cic., *Ac.*, I, xxxiv.
- ¹² Zeller, *Phil. der Griech.*, III, i, 617.
- ¹³ Brochard, *op. cit.*, 208.
- ¹⁴ Cic., *Ac.*, II, ii.
- ¹⁵ Meyer, *op. cit.*, 452.
- ¹⁶ Ueberweg-Praechter, *op. cit.*, 495.
- ¹⁷ Cic., *Ac.*, II, xxii.
- ¹⁸ Sext. Em., *Hyp.*, I, 235.

CHAPTER XX

- ¹ Friedrich Dannemann, *Die Naturwissenschaften in ihrer Entwicklung und in ihrem Zusammenhange*. Leipzig, 1910, I, 107.
- ² Heiberg, *op. cit.*, 55.
- ³ Susemihl, *op. cit.*, I, 7-20.
- ⁴ Susemihl, *op. cit.*, 110, 512.
- ⁵ Heiberg, *op. cit.*, 124.
- ⁶ H. Haeser, *Geschichte der Medizin*. Jena, 1875, 233.
- ⁷ Heiberg, *op. cit.*, Medizin.
- ⁸ Heiberg, *op. cit.*, Medizin.
- ⁹ Wilhelm Schmidt, *Geschichte der Litteratur*. München, 1911, 225.
- ¹⁰ Heiberg, *op. cit.*, 105.
- ¹¹ Plutarch's *Lives*, Marcus Cato, XXIII.
- ¹² Sext. Em., *Math.*, VII, 202.
- ¹³ Sext. Em., *Adv. Math.*, VII, 202. *Hyp.*, I, 238. Haeser, *op. cit.*, 268.
- ¹⁴ Susemihl, *op. cit.*, II, 418.
- ¹⁵ Sext. Em., *Hyp.*, I, 241.
- ¹⁶ Sext. Em., *Hyp.*, I, 231.
- ¹⁷ Susemihl, *op. cit.*, II, 420. Diog. Laert., IX, xii, 7.
- ¹⁸ Claudius Galen, *Op. Omn.* Kuhn, Lipsiae, 1826, II, viii, 124.

CHAPTER XXI

- ¹ Diog. Laert., IX, xii, 7. Photius, *Bibliotheca*, or *Myriobiblon*, Cod. 212, 170. Euseb., *Praep. Evang.*, XIV, xviii, 29.
- ² Zeller, *Outlines*, 301.
- ³ Sext. Em., *Hyp.*, I, 180, 210, 222.
- ⁴ Diog. Laert., IX, xii, 7.
- ⁵ Phot. Cod. 212, evidently copying from Aenesidemus' books. Zeller, *Phil. der Griech.*, III, ii, 16, 4.
- ⁶ Natorp, *Forschungen zur Geschichte des Erkenntnisproblems im Altertum*, Berlin, 1884, 66.
- ⁷ Sext. Em., *Hyp.*, I, 235.
- ⁸ Cic., *De Finibus*, II, xi.
- ⁹ Diog. Laert., IX, xi, 13 and IX, xii, 7.
- ¹⁰ Sext., Em., *Hyp.*, I, 232.
- ¹¹ Photius, *op. cit.*, Cod. 212.
- ¹² Phot. Cod. 212, 170.
- ¹³ Zeller, *Phil. der Griech.*, III, ii, 10. Sext. Em., *Adv. Math.*, VII, 325. Diog. Laert., IX, xi, 8, 9.

CHAPTER XXII

- ¹ Sext. Em., *Adv. Math.*, VII, 345. Euseb., *Praep. Evang.*, XIV, xviii, 11.
- ² Zeller, *Phil. der Griech.*, III, ii, 25.
- ³ Pappenheim, *Erläuterung Pyrrh. Grundzügen*. Heidelberg, 1888, 35. Fabricius, *De Sexto Empirico Testimonia*, 1718, Cap. XIV.
- ⁴ Euseb., *Praep. Evang.*, XIV, xviii, 11.
- ⁵ Fabricius, on *Hyp.*, I, 36.
- ⁶ Windelband, *History of Ancient Philosophy*. Macmillan, 1901, 200.
- ⁷ Sext. Em., *Hyp.*, I, 38.
- ⁸ Diog. Laert., IX, xi, 8, 9. Patrick, *Sextus Empiricus and Greek Scepticism*. Cambridge, 1899, 38.
- ⁹ Hans von Arnim, *Quellen Studien zu Philo von Alexandria*. Berlin, 1888, 79.
- ¹⁰ Hans von Arnim, *Quel. Stud. z. Philo*, 56 seq.
- ¹¹ A. Cornelius Celsus, *De Medicina*. James Greene, Edinburgh, 1914. Bk. III, iv; Bk. IV, i; Bk. VII, i.

CHAPTER XXIII

- ¹ Sext. Em., *Hyp.*, I, 180-186. Fabricius, *op. cit.*, XVII, 180.
- ² Sext. Em., *Math.*, VIII, 150-151.
- ³ Diog. Laert., IX, xi, 13.
- ⁴ Photius, Cod. 212, 170.
- ⁵ Sext. Em., *Hyp.*, I, 185.
- ⁶ Sext. Em., *Math.*, IX seq.

CHAPTER XXIV

- ¹ Sext. Em., *Hyp.*, I, 210-212.
- ² Sext. Em., *Hyp.*, I, 180, 212. *Adv. Math.*, VII, IX, X.
- ³ Photius, *Cod.* 212, 170, B, 12.
- ⁴ Hans von Arnim, *Quel. Stud. z. Philo.*, 56 seq.
- ⁵ Sext. Em., *Hyp.*, I, 210.
- ⁶ Susemihl, *op. cit.*, II, 344, Note 507.
- ⁷ Celsus, *op. cit.*, Proem.
- ⁸ Sext. Em., *Hyp.*, III, 138-139. More, *op. cit.*, 377.
- ⁹ Susemihl, *op. cit.*, II, 346, Notes 516, 519.

CHAPTER XXV

- ¹ Diog. Laert., IX, xi, 8.

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- ¹ Sext. Em., *Hyp.*, I, 241.
- ² Heiberg, *op. cit.*, 107.
- ³ Heiberg, *op. cit.*, 108.
- ⁴ Wellmann, *Herm.*, 47; 1912, 156.
- ⁵ Diog. Laert., IX, xi, 13.
- ⁶ Compare Natorp, *op. cit.*, 302.
- ⁷ Sext. Em., *Hyp.*, I, xv.
- ⁸ Sext. Em., *Math.*, VII, 185-186.
- ⁹ Sext. Em., *Hyp.*, I, 168, 169, 170-177.
- ¹⁰ See index of Bekker's edition of Sextus' works.
- ¹¹ Zeller, *Phil. der Griech.*, III, ii, 48.
- ¹² Sext. Em., *Hyp.*, I, 39, 178-79.
- ¹³ Diog. Laert., X, xii, 13; IX, xii, 7.
- ¹⁴ Sext. Em., *Hyp.*, I, 222. Diog. Laert., IX, xii, 7.
- ¹⁵ Goedeckemeyer, *op. cit.*, 257.
- ¹⁶ Galen, *Subfiguratio Empirica*, throws light on some of the problems of the period of Menodotus. The best edition is that of Kuhn. Leipzig, 1821-33.
- ¹⁷ Zeller, *Outlines*, 304.
- ¹⁸ Suidas, *Favorinus*. Goedeckemeyer, *op. cit.*, 248-257.
- ¹⁹ Compare Zeller, *Phil. der Griech.*, III, ii, 7, 1.
- ²⁰ Galen, *Sub. Em.*, Kuhn, Lipsiae, 1821, Cap. XII.
- ²¹ Susemihl, *op. cit.*, 424, Note 44.
- ²² Diog. Laert., IX, xi, 13.

CHAPTER XXVII

- ¹ Sext. Em., *Hyp.*, II, 238. *Math.*, A, 261.
- ² Sext. Em., *Math.*, A, 61, VII, 202. Fabricius, *Testimonia*, 2.

- ³ Sext. Em., *Hyp.*, I, 236-241.
- ⁴ Sext. Em., *Math.*, VIII, 191.
- ⁵ Sext. Em., *Hyp.*, I, 236.
- ⁶ Natorp., *op. cit.*, 157.
- ⁷ Diog. Laert., IX, xii, 7.
- ⁸ Sext. Em., *Math.*, VIII, 258.
- ⁹ Pappenheim, *Lebensverhältnisse des Sextus Empiricus*. Berlin, 1887, 30.
- ¹⁰ Sext. Em., *Hyp.*, I, i.
- ¹¹ Sext. Em., *Math.*, A, 246; *Hyp.*, I, 152; *Hyp.*, III, 211, 214.
- ¹² Haas, *op. cit.*, 10.

CHAPTER XXVIII

- ¹ Suidas, *Lexikon*, Sextus.
- ² Euseb., *Praep. Evang.*, XIV, xviii, 29.
- ³ Sext. Em., *Hyp.*, III, 120.
- ⁴ Sext. Em., *Hyp.*, II, 98.
- ⁵ Sext. Em., *Hyp.*, I, 146, 149, 152. *Hyp.*, III, 120.
- ⁶ Galen, *op. cit.*, VIII, 751.
- ⁷ Galen, *Sub. Fig. Em.*, XI 13, 14. Haas, *op. cit.*, 15.
- ⁸ *Archiv. für Geschichte der Phil.*, Berlin, 1898, Bd. XI, iv, "Zur Frage nach Lukians phil. Quellen," von Karl Praechter.
- ⁹ Bekker, *Index*.
- ¹⁰ Pappenheim, *Der Sitz der Schule der griechischen Skeptiker*. Berlin, 1887.
- ¹¹ Fabricius, *De Sexto Empirico Testimonia*.
- ¹² Diog. Laert., IX, xii, 7.
- ¹³ Pappenheim, "Sitz der skeptischen Schule," *Archiv. für Geschichte der Phil.*, 1888. *Adv. Math.*, X, 15, 95.
- ¹⁴ Sext. Em., *Math.*, VII, 1.
- ¹⁵ Compare Brochard, *op. cit.*, 317 *seq.*
- ¹⁶ Susemihl, *op. cit.*, 251, Note 84.
- ¹⁷ Patrick, *op. cit.*, 33-34.
- ¹⁸ Goedeckemeyer, *op. cit.*, 331, 1.
- ¹⁹ Diog. Laert., IX, xii, 7.

CHAPTER XXIX

- ¹ Diog. Laert., *Proem.*, XIII.
- ² Sext. Em., *Hyp.*, I, 10-22.
- ³ Sext. Em., *Hyp.*, I, 28-30; *Math.*, XI, 146-160.

CHAPTER XXX

- ¹ Zeller, *Outlines*, 287.

CHAPTER XXXI

- ¹ Sextus Empiricus, Bekker's Edition, Preface. John Owen, *Sceptics of the French Renaissance*. London, 1893, 653.
- ² Owen, *Italian Renaissance*. London, 1893, 454.
- ³ Owen, *ibid.*, 165.
- ⁴ Edwin Pears, *The Destruction of the Greek Empire*. London, 1903, 405.
- ⁵ *Ibid.*, 405.
- ⁶ Harold Sunderland, *Islam and the Divine Comedy*. London, 1826.
- ⁷ Dannemann, *op. cit.*, 291.
- ⁸ Pears, *op. cit.*, 405.
- ⁹ Owen, *Italian Renaissance*, 130.
- ¹⁰ Owen, *Italian Renaissance*, 184.
- ¹¹ Edward Dowden, *Michel de Montaigne*. London, 1906, 156.
- ¹² Owen, *French Renaissance*, 475.
- ¹³ *Ibid.*, Preface.
- ¹⁴ Owen, *French Renaissance*, Preface.

CHAPTER XXXII

- ¹ Burnet, *op. cit.*, Fr. 9.

APPENDIX

- ¹ Abridged from *Sextus Empiricus and Greek Scepticism*, by M. M. Patrick. Cambridge, 1899. *Hypotyposes*, I, 36 *seq.*
- ² Quoted previously, page 223.

BIBLIOGRAPHY

- Aall, Anathon, *Der Logos*. Leipzig, 1896.
- Aristotle on His Predecessors. Taylor. *Phil. Classics*.
- Arnim, Hans von, Quellenstudien zu Philo von Alexandria. *Philologische Untersuchungen*. Berlin, 1888, Band XI.
- , Antigonus von Carystus. *Phil. Un.*, Band IV.
- , *Leben und Werke des Dio von Prusa*. Berlin, 1898.
- Athenaeus, *Deipnosophistae*. Bohn Library, London, 1853.
- Barry, Frederick, *The Scientific Habit of Thought*. Columbia University Press, 1927.
- Bonnet, Max, *De Claudii Galeni Subfiguratio Empirica*. Bonn, 1872.
- Brochard, Victor, *Les Sceptiques grecs*. Paris, 1887.
- , Pyrrho et le Scepticism primitif. *Revue Phil. Ribot*, No. 5. Paris, 1885.
- Burnet, John, *Early Greek Philosophy*. London, 1920.
- , *Greek Philosophers, Thales to Plato*. London, 1914.
- Celsus, A. Cornelius, *De Medicina*. James Grieve, Edinburgh, 1914.
- Cicero, Standard Works.
- Dannemann, Friedrich, *Die Naturwissenschaften in ihrer Entwicklung und in ihrem Zusammenhange*. Band I. Leipzig, 1910.
- Dewey, John, *Reconstruction in Philosophy*. New York, 1920.
- Diels, Hermann, *Die Fragmente der Vorsokratiker*. Berlin, 1912.
- , *Fragmente der philosophischen Dichter*. Berlin, 1919.
- Diogenes Laertius, *De Vitis Philosophorum*. Lipsiae, 1895.
- Dowden, Edward, *Michel de Montaigne*. London, 1906.
- Eusebius, *Praeparatio Evangelica*. Lipsiae, 1867.
- Fabricius, J. A., *De Sexto Empirico Testimonia*. Lipsiae, 1718.
- Foucart, George, *Des associations religieuses chez les Grecs*. Paris, 1873.

- Galen, Claudius, *Opera Omnia*. Kuhn, Lipsiae, 1826.
- Garrison, Fielding H., *Introduction to the History of Medicine*. Philadelphia, 1917.
- Goedeckemeyer, Albert, *Die Geschichte des griechischen Scepticismus*. Leipzig, 1905.
- Gomperz, Theodore, *Greek Thinkers*. English Translation, London, 1920.
- Haas, P. Leander, *Leben des Sextus Empiricus*. Burghausen, 1882.
- Haeser, H., *Lehrbuch der Geschichte der Medizin*. Jena, 1875.
- Harrison, Jane Ellen, *Primitive Athens as Described by Thucydides*. Cambridge, 1906.
- Hastings, James, *Dictionary of Religion, Buddhism*. Monier Williams.
- Heiberg, I. L., *Geschichte der Mathematik und Naturwissenschaften im Altertum*. München, 1925.
- Herodotus, *History of Greece*. Rawlinson's Translation. Everyman's Library, London, 1920.
- Hiller, Eduard, *Anthologica Lyrica*.
- Hirzel, R., *Untersuchungen zu Ciceros philosophischen Schriften*. Leipzig, 1883.
- Hume, Edward Maslin, *The Renaissance in Continental Europe*. New York, 1914.
- Ilberg, Johannes, Ueber die Schriftstellerei des Claudius Galenus. *Rheinisches Museum*, IV, 1892.
- Keith, A. Berriedale, *Buddhist Philosophy in India and Ceylon*. Clarendon Press, 1923.
- Lübker's *Real-Lexikon des klassischen Altertums*. Teubner, Berlin, 1914.
- Maccoll, Norman, *The Greek Sceptics, Pyrrho to Sextus*. London, 1869.
- Mangain, Gabriel, *Evolution intellectuelle d'Italie*. Paris, 1909.
- Martha, Constant, *Etudes morales sur l'Antiquité*. Paris, 1896.
- Meyer, Hans, *Geschichte der alten Philosophie*. Band X, München, 1925.
- Moore, Paul Elmer, *Hellenistic Philosophies*. Princeton, 1923.

- Natorp, Paul, *Forschungen zur Geschichte des Erkenntniss Problems bei der Alten*. Berlin, 1884.
- Owen, John, *Sceptics of the Italian Renaissance*. London, 1893.
- , *Sceptics of the French Renaissance*. 1893.
- Pappenheim, Eugen, *Erläuterung zu des Sextus Empiricus Pyrrhonischen Grundzügen*. Heidelberg, 1888.
- , *Die Tropen der griechischen Skeptiker*. Berlin, 1885.
- , *Lebensverhältnisse des Sextus Empiricus*. Berlin, 1887.
- , *Der Angebliche Heraklitismus des Ainesidemus*. Berlin, 1889.
- , *Der Sitz der Schule der griechischen Skeptiker*. Berlin, 1887.
- Patrick, George T. W., *Introduction to Philosophy*. Houghton Mifflin Company, Boston, New York, Chicago and San Francisco; The Riverside Press, Cambridge, 1924.
- Patrick, Mary Mills, *Sextus Empiricus and Greek Scepticism*. Deighton, Bell & Co., Cambridge, England, 1899.
- Pausanias, *Description of Greece*. Bohn's Classical Library, 1905.
- Pears, Edwin, *The Destruction of the Greek Empire*. London, 1903.
- Photius, *Bibliotheka*; or, *Myriobiblon*. Bekker, Berlin, 1824.
- Plutarch's *Lives*. Bell and Son, London, 1924.
- Praechter, Karl, *Die Litteratur zu den Nacharistotelischen Philosophie*. *Jahresbericht der Klas. Altertums Wissenschaft*. 1898.
- , *Zur Frage nach Lukian's philosophischen Quellen*. *Archiv für Philosophie*, Band XI, 4.
- Pratt, James Bissett, *India and Its Faiths*. Houghton Mifflin Company, 1915.
- Revelle, Jean, *Les Origines de l'Episcopat*. Paris, 1894.
- Russell, Bertrand, *Philosophy*. New York, 1927.
- Saisset, Emile, *Le Scepticism Aenesideme-Pascal-Kant*. Paris, 1864.
- Sappho, *Anthologica Lyrica*. Eduardus Hiller. Lipsiae, 1890.
- Schmekel, A., *Die Philosophie der mittleren Stoa*. Berlin, 1893.
- Schmidt, Wilhelm, *Geschichte der Litteratur*. München, 1911.
- Sepp, Simon, *Die Philosophische Richtung des Cornelius Celsus*. Freising, 1893.
- Sextus Empiricus, *Complete Works*. Bekker, Berlin, 1842.
- Stobaeus, Johannes, *Sermones*. Wachsmuth, Lipsiae, 1912.

- Suidas, *Lexikon*. Bekker, Berlin, 1854.
- Sunderland, Harold, *Islam and the Divine Comedy*. London, 1926.
- Susemihl, Franz, *Geschichte der griechischen Litteratur in der Alexandrinerzeit*. Leipzig, 1891.
- Taylor, A. E., *Aristotle on His Predecessors*. "Phil. Classics." London, 1907.
- Ueberweg-Praechter, *Grundriss der Geschichte der Philosophie des Altertums*. Berlin, 1920.
- Wachsmuth, *Sillographori Graecorum Reliquiae*. Lipsiae, 1885.
- Wilamowitz-Moellendorff, *Philologische Untersuchungen*. Berlin, 1880.
- Zeller, Eduard, *Outlines of the History of Greek Philosophy*. London, 1922.
- , *Die Philosophie der Griechen*. Leipzig, 1844-. (Publication continued.)

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